CANADA / NEW BRUNSWICK
CONSERVATION AND
ALTERNATIVE ENERGY AGREEMENT

L'ENTENTE CANADA / NOUVEAU-BRUNSWICK
SUR LES ÉCONOMIES D'ÉNERGIE
ET LES ÉNERGIES DE REMPLACEMENT

Survey of Public Attitudes Towards Energy Conservation

April 22, 1988

Prepared for:

Department of
Natural Resources and Energy
Fredericton, N.B.

and

Energy Mines and
Resources
Canada

Prepared by:

Baseline Market Research Ltd.
Fredericton, N.B.

DISCLAIMER

This report, funded by the New Brunswick Department of Natural Resources and Energy and Energy, Mines and Resources Canada is published as a public service for the information of the public. The parties do not, however, warrant the accuracy of its contents and cannot guarantee or assume any liability for the effectiveness of economic benefits of the devices and processes described in the report or that their use does not infringe privately-owned rights.

DÉNI DE RESPONSABILITÉ

Ce rapport, financé conjointement par le ministère des Ressources naturelles et de l'Énergie du Nouveau-Brunswick et Énergie, Mines et Ressources Canada, est publié à titre de service public. Les gouvernements fédéral et provincial n'assurent aucunement l'exactitude du contenu, l'efficacité des appareils et des procédés et, enfin, les économies que préconise le rapport. L'utilisation de ces systèmes de conservation d'énergie ne doit, à aucun moment, empiéter sur les droits d'autrui.

TABLE OF CONTENTS

TOPIC	PAGE
LIST OF TABLES	
EXECUTIVE SUMMARY	
INTRODUCTION	1
RESEARCH OBJECTIVES	1
RESEARCH METHODOLOGY	2
PRIMARY RESEARCH APPROACHES	4
QUESTIONNAIRE DESIGN	4
FOCUS GROUP RESEARCH	7
SUMMARY OF METHODOLOGY	8
RESEARCH FINDINGS	9
INTRODUCTION	9
SURVEY SAMPLING	10
FOCUS GROUP SAMPLE SELECTION	11
CONSUMER SURVEY SAMPLE DESCRIPTION	11
ENERGY: CONSERVATION AND CONSUMPTION	19
ENERGY CONSERVATION: ATTITUDES AND POSITIONING	34
FUTURE ENERGY CONSERVATION ACTIVITIES	44
ENERGY CONSERVATION: KNOWLEDGE AND AWARENESS	48
CONCLUSIONS	59
APPENDIX A: QUESTIONNAIRE	
APPENDIX B: FOCUS GROUP COMMENTS	
APPENDIX C: BIBLIOGRAPHY	
RESEARCH RECOMMENDATIONS: SEPARATE COVER	

LIST OF TABLES

TABLE 1 - SUMMARY OF CONSUMER CONTACTS
TABLE 2 - GEOGRAPHICAL DISTRIBUTION OF SURVEY RESPONDENTS
TABLE 3 - MOTHER-TONGUE OF RESPONDENTS
TABLE 4 - DISTRIBUTION OF INCOME
TABLE 5 - LEVEL OF EDUCATION
TABLE 6 - TYPE OF OWNER-OCCUPIED DWELLING
TABLE 7 - HOUSEHOLD BY YEAR OF CONSTRUCTION
TABLE 8 - LENGTH OF TIME IN HOME
TABLE 9 - HOME CHARACTERISTICS
TABLE 10 - CURRENT MARKET VALUE OF HOME BY REGION
TABLE 11 - NUMBER OF PEOPLE IN HOUSEHOLD
TABLE 12 - EMPLOYMENT STATUS
TABLE 12A AGE CATEGORY OF RESPONDENTS

TABLE 13 - HOUSEHOLD ENERGY CONSERVATION ACTIVITIES
TABLE 14 - ENERGY CONSUMPTION IN HOME
TABLE 15 - ENERGY PROFILE BY FUEL TYPE
TABLE 16 - HOUSEHOLD FUEL PROFILE
TABLE 17 - CHANGES IN HOME HEATING SYSTEMS
TABLE 18 - DAILY HOUSEHOLD TEMPERATURE PATTERNS
TABLE 19 - HOUSEHOLD TEMPERATURE COMPARED TO FIVE YEARS AGO
TABLE 20 - ESTIMATED AVERAGE HOUSEHOLD APPLIANCE ENERGY COSTS
TABLE 20A AN ESTIMATE OF AVERAGE HOUSEHOLD HEATING COSTS
TABLE 21 - ESTIMATE OF AVERAGE HOUSEHOLD TOTAL ENERGY COSTS
TABLE 22 - ATTITUDE TOWARDS HOME HEAT COSTS BY FUEL TYPE
TABLE 23 - CURRENT ISSUES OF IMPORTANCE
TABLE 24 - ISSUE OF MOST IMPORTANCE TO N.B. HOMEOWNERS
TABLE 25 - MOST IMPORTANT N.B. ISSUE BY DEMOGRAPHICS
TABLE 26 - PERCEIVED EXPENSE OF HOUSEHOLD COSTS
TABLE 27 - COST OF MOST CONCERN TO N.B. HOMEOWNERS
TABLE 28 - COST OF MOST CONCERN BY DEMOGRAPHICS
TABLE 29 - ATTITUDE TOWARD ENERGY CONSERVATION
TABLE 30 - FUTURE ENERGY CONSERVATION ACTIVITIES
TABLE 30A PERCEIVED EFFECTIVENESS OF ENERGY CONSERVATION EFFORTS
TABLE 31 - AWARENESS OF ENERGY PROGRAMS
TABLE 32 - ENERGY PROGRAMS USED
TABLE 33 - MONEY RECEIVED THROUGH PROGRAMS
TABLE 34 - LIKELIHOOD OF APPLYING FOR AN ENERGY LOAN
TABLE 35 - ENERGY EFFICIENCY RATING OF HOME
TABLE 36 - MEANS OF INCREASING ENERGY EFFICIENCY
TABLE 37 - INFORMATION OF INTEREST
TABLE 38 - INFORMATION DISTRIBUTION METHODS
TABLE 39 - ROLE OF GOVERNMENT IN ENERGY CONSERVATION

EXECUTIVE SUMMARY

In November, 1987, the Department of Natural Resources and Energy, Minerals and Energy Division, retained the services of Baseline Market Research, Ltd. to conduct a Survey of Public Attitudes Towards Energy Conservation. This study was designed to accomplish the following objectives:

a) to determine the rank of energy costs and conservation with respect to other social or economic issues;

b) to determine the barriers to energy conservation and their relative importance, including cost of energy, availability of information, knowledge level and other factors;

c) to assess motivational factors affecting participation in energy conservation activities and future needs;

d) to determine awareness of specific groups of energy conservation activities and current and future participation rates;

e) to determine the level of homeowner energy conservation knowledge and past conservation activities;

f) to identify the consumer's sources of information on energy conservation;

g) to determine the consumer perceptions of the adequacy of information on energy conservation;

h) to determine the level of support for government roles in provision of energy conservation related information and the

useful methods of providing information from the consumers point of view; and

i) to determine the level of support for and awareness of government use of selected means of providing information on conservation, i.e. publications, advertising, toll-free telephone lines, displays, personal visits, seminars and point of sale material.

In order to collect the range of information needed for this project, Baseline implemented a three stage research approach consisting of secondary research, a province-wide telephone survey of 600 households and the use of focus groups in three communities: Fredericton, Moncton and Edmundston.

As a result of this research effort, the following statements can be made about energy conservation attitudes and behaviours:

1) In general, the typical New Brunswick homeowner has undertaken at least some of the responsibility to reduce his/her household energy consumption. Such activity has likely involved insulating walls and ceilings and caulking windows and doors. It is also likely that most of the people who wanted to convert to a different type of heating system have already done so.

2) Among homeowners today the motivation to conserve is not based on a recognition of the need to reduce the consumption of energy; it is almost always based on the desire to save money or increase comfort. If the cost of conservation does not yield an adequate pay back in terms of reduced energy costs, it is unlikely that people

will invest in conservation activities. However, if the need to increase comfort levels is present, then cost may not be of the utmost concern.

3) In 1987, according to respondents in this survey, the average total energy costs for an electrically heated home was $1,378.00, the average total energy costs for a home heated with oil was $1,583.00 and the average total energy cost for a home heated with wood was $1,075.00. Approximately 37% of the homes in this province use electricity as a primary heat source, 35% use wood as a primary heat source and 27% use oil as a primary heat source.

4) It appears that the term "energy conservation" is not appealing to consumers, perhaps because it is associated with reduced temperatures, or more difficult ways of doing things, such as heating with wood. With today's consumers, the use of the term "energy efficiency" might be more appropriate.

5) Those charged with the responsibility of increasing the amount of energy conservation activities may have a difficult time in the future because of an apparent lack of consumer interest, or, because of the perception of some consumers which suggests that the cost of some of the measures needed for their homes are too expensive. For example, the lack of interest serves as a deterrent to undertaking some of the more basic conservation activities, while the perceptions concerning costs might deter completion of some of the major measures required. Both of these influences have to be considered, along with a lack of information about the energy efficiency measures which may be most appropriate for a housing unit.

6) While many homeowners believe that major renovations are required, the reported activities suggest that basics such as insulating the hot water heater and heat ducts have not been done in many homes. Again however, this will happen only if the homeowners can be made to see the benefits of such activities.

7) Although few homeowners suggest the need for a

great deal of additional information, this is likely due to the low level of interest in energy conservation. In the focus groups for example, most had done a great deal of work on their homes to make them more efficient. As well, most understood basic concepts of energy efficiency, or at least indicated that insulation was considered as the starting point.

8) The lack of interest is perhaps a greater threat to energy conservation practices over the long run. If people do not think energy conservation is important, they will not only reduce efforts to make their home more efficient, but we may see a decreasing emphasis within the building trades which, in turn, would produce more inefficient homes. To avoid this problem, it may be appropriate to have some ongoing programs within the school system to teach youth about the need for efficient use of energy, the social and economic benefits of such activities, and the types of things that should be done in homes. One should be reminded that it was in the not too distant past that North Americans were found to be totally unprepared to cope with a reduced supply of needed sources of energy. The education approach would make people aware of the needs and the basic procedures.

9) The research suggests that reliance on passive forms of education, such as telephone call lines and the availability of material following a request, are not appropriate for today's consumers. If the government wants to make people aware of the need for efficient use of energy and the ways in which they can have an energy efficient home, they have to become active promoters and distributors of information. They have to promote the concept of energy efficiency and make the information available at points where people are most likely to come into contact with it. For example, study participants suggest that information should be available at electric utility offices throughout the province, perhaps available at post offices and definitely through local home shows.

These activities, along with the education programs,

should become an ongoing part of the communication effort in this area.

In conclusion, the information in this data suggests that government's role in energy conservation activities should perhaps be directed at keeping the public informed, and keeping the interest and awareness at an adequate level to ensure efficient use of our energy resources.

INTRODUCTION

In November, 1987 the Department of Natural Resources and Energy, Energy Branch, retained the services of Baseline Market Research, Ltd. (Baseline) to conduct a Survey of Public Attitudes Towards Energy Conservation. This report provides a summary of information related to that project including a presentation of the research objectives, a discussion of the research approach and a detailed presentation of the research findings.

RESEARCH OBJECTIVES

As initially presented in the terms of reference and the research proposal, this study was designed to collect needed information to address the following objectives:

a) to rank energy costs and conservation with respect to other social or economic issues;

b) to determine the barriers to conservation and their relative importance, including cost of energy, availability of information, knowledge level and other factors;

c) to assess motivational factors affecting participation in energy conservation activities and future needs;

d) to determine awareness of a specific group of conservation activities and current and future participation rates;

e) to determine the level of homeowner conservation knowledge and past conservation activities;

f) to identify the consumer's sources of information on energy conservation;

g) to determine consumer perceptions of the adequacy of information on energy conservation;

h) to determine the level of support for government roles in provision of conservation related information and the useful methods of providing information from the consumer's point of view; and

i) to determine the level of support for and awareness of government's use of selected means of providing information on conservation, i.e. publications, advertising, toll-free telephone lines, displays, personal visits, seminars and point of sale material.

These objectives were reviewed with, and approved by, the Steering Committee for this project.

To achieve these objectives, Baseline developed the comprehensive approach presented in the following section.

RESEARCH METHODOLOGY

In order to collect the range of information needed for this project, Baseline implemented a three stage research approach consisting of secondary research, a province-wide telephone survey and focus group research.

In the first stage of this project we conducted an extensive search of existing literature related to the overall issue of energy conservation. For example, we located several studies which had been conducted at the provincial and federal levels concerning attitudes toward energy conservation. Information from these studies will be presented as reference points when appropriate. The questionnaires used in these studies also provided useful information in the development of our data collection instruments. A detailed bibliography is included in Appendix C of this report.

The search of existing literature identified the fact that both research and interest in the general area of energy conservation seems to have passed its high point: as the search covered more current information, and thus became further removed from the era of the "energy crunch" and higher oil prices, the studies and writings became less numerous. This is, in turn, reflected in the patterns observed in the collection of primary information: as the recall of the oil crisis decreased, so did the interest in energy-related home improvements and energy

conservation.

The search of literature revealed little in terms of attitudes and patterns of New Brunswickers in regard to energy conservation-related activities.

PRIMARY RESEARCH APPROACHES:

Baseline developed a two stage approach to the collection of primary data: first of all, a province-wide telephone survey of 600 households was implemented. This was followed by a series of six focus groups. This research approach involved the following series of steps.

QUESTIONNAIRE DESIGN

After completion of the review of secondary literature, which produced material for comparative purposes, Baseline staff developed a preliminary research instrument for review by the steering committee. This questionnaire was designed to assess both past and planned behaviour of New Brunswickers concerning energy conservation activities, attitudes and opinions related to energy conservation and an assessment of the relative importance of energy conservation

vis-a-vis other issues of concern.

Once reviewed and approved by the Steering Committee, the questionnaire was made available in both official languages and pretested by Baseline's interview staff. The pretest revealed that the only problem requiring attention involved the length of time needed to complete each interview. In order to make the needed adjustments, and not miss the opportunity to ask some important questions, Baseline opted to ask all respondents the key energy related questions and then divide the sample into two groups, one of which would be asked some of the remaining questions, those considered less essential to the overall research effort. This explains why, in the presentation of the results from this survey, the number of respondents is less than 600 on some of the tables; this indicates the questions not asked of all respondents. Reference to the questionnaire in Appendix A also identifies these questions.

All households selected to participate in this study were drawn from a proportionally allocated

sample of all homes with telephones in New Brunswick. A more detailed explanation of the sampling approach is explained in a subsequent section.

As is our experience, the sample selected for this study, as discussed below, provided a solid representation of both linguistic communities and the different regions of the province (the telephone exchange is the unit on which each respondent was categorized into regions). Household language and/or mother tongue is the basis for linguistic classifications.

Our sample of 600 provided a sufficient basis for subgroup analysis. While the margin of error for the overall information depends on the distribution of actual responses to a particular question, it would generally be within $\pm$4% at the widest range (at the 95% level of confidence).

All interviews were conducted through Baseline's central facility in Fredericton.

Interviewers made at least four efforts to contact

each household. Calls were made during daytime and evening hours. All interviews were conducted in the official language chosen by the respondent.

All interviews were edited, coded and computerized by Baseline personnel. Data was analyzed using SPSS-PC+, a statistical package.

The information collected through this stage of the project is summarized elsewhere in this report.

FOCUS GROUP RESEARCH

In order to expand upon the information collected through the quantitative research, Baseline conducted focus groups in Moncton, Edmundston and Fredericton (changes in location from the original proposal were approved by departmental staff). Baseline conducted a total of six focus groups: two in each city. Four groups were conducted in English and two groups were conducted in French. These groups expressed opinions about energy conservation in greater detail than possible in a telephone survey and explored the area of

informational needs and the communication of energy related messages. In these groups the role of government, with regard to energy conservation, was also discussed as was the promotional material available.

These discussion groups involved between ten and twelve people who met with a facilitator for about two hours. People were recruited from among those who had completed the quantitative study. Each person who attended was paid a $25 fee.

SUMMARY OF METHODOLOGY

The research plan outlined above and implemented for this project has provided the Energy Branch with a comprehensive perspective on public attitudes and behaviours related to energy conservation.

The following material demonstrates the research findings for this project.

RESEARCH FINDINGS

INTRODUCTION

In an effort to meet the study objectives as stated in the research proposal, a comprehensive telephone survey of 600 residential households in New Brunswick was conducted by Baseline Market Research during February, 1988. Upon completion of the quantitative field work, a preliminary assessment of results was made in order to develop a Discussion Guide for the purpose of conducting the qualitative phase of the research. Six focus group sessions were conducted, which were designed to explore in-depth attitudes and motivations of New Brunswick homeowners in the area of energy conservation.

The combination of quantitative and qualitative information provided the material required for an in-depth analysis of the energy conservation attitudes and practices of New Brunswick homeowners. The analysis undertaken in this report reflects the objectives as stated.

SURVEY SAMPLING

As mentioned, Baseline has designed a sampling procedure to select 600 households, province-wide, through a proportionally allocated random selection procedure. This procedure allows for a geographical representation of all areas in the province.

The households were selected through the use of a random digit dialing procedure to ensure access to both listed and unlisted telephone numbers. Once a household was contacted, interviews were conducted with the person most knowledgeable about household energy use and conservation practices. A screening process ensured that dwellings were owner-occupied single or duplex units. The following contacts were needed to complete 600 interviews.

TABLE 1
SUMMARY OF CONSUMER CONTACTS

CALL DISPOSITION	NUMBER OF CONTACTS
TOTAL CONTACTS	1,235
INELIGIBLE HOMES	- 394
	841
REFUSALS	-239
COMPLETIONS	602
RESPONSE RATE	602/841 = 72%

FOCUS GROUP SAMPLE SELECTION

During data collection, participants were asked if they would be willing to take part in follow-up focus groups. A follow-up telephone call and mail-out ensured an adequate number of participants for each group.

CONSUMER SURVEY SAMPLE DESCRIPTION

The result of the 600 completed telephone interviews produced a sample of survey respondents with the following characteristics.

TABLE 2
GEOGRAPHICAL DISTRIBUTION
OF SURVEY RESPONDENTS

	PERCENT	
AREA*	SAMPLE	POPULATION
BATHURST	10%	11%
CAMPBELLTON	4%	5%
CHATHAM	6%	6%
EDMUNDSTON	10%	8%
FREDERICTON	15%	16%
MONCTON	23%	24%
SAINT JOHN	19%	21%
ST. STEPHEN	4%	4%
WOODSTOCK	9%	5%
	100%	100%

*Note: An area is defined as having the geographical scope of the telephone directory.

The variance in percent distribution of the actual

population versus the sampling distribution is not considered to be statistically significant.

The following table summarizes the survey sample versus the population on the basis of language.

TABLE 3
MOTHER-TONGUE OF RESPONDENTS

MOTHER TONGUE	PERCENT SAMPLE	PERCENT POPULATION
ENGLISH	66%	64%
FRENCH	32%	35%
OTHER	2%	1%
	100%	100%

In a follow-up question, approximately 72% of respondents claimed English was the most common language spoken in their home.

It was expected that an approximate 60/40 ratio of male/female respondents would be achieved. The actual ratio for this survey was in fact 54% male and 46% female.

The following table illustrates the income distribution of households participating in this survey:

TABLE 4
DISTRIBUTION OF INCOME

TOTAL HOUSEHOLD INCOME (BEFORE TAXES)	SAMPLE	POPULATION(1)
UNDER $15,000	21%	30%
$15,000 TO $20,000	16%	13%
$20,001 TO $25,000	12%	11%
$25,001 TO $30,000	9%	9%
$30,001 OR MORE	42%	37%
	100%	100%

(1) Statistics Canada: Income Distribution By Size - (13-207) 1985 Income Levels

Although it would appear that the sample represents the mid-income categories quite accurately, an over-representation of upper-income and a corresponding under-representation of lower income households was expected due to the sample screening which required the respondent to be living in an owner-occupied home. One would expect homeowners to have slightly higher income levels than the total population of owners and renters.

Survey respondents were also compared to the population on the basis of education level. The following table summarizes this comparison:

TABLE 5
LEVEL OF EDUCATION

EDUCATION	SAMPLE	POPULATION
LESS THAN HIGH SCHOOL	39%	55%
HIGH SCHOOL GRADUATE	26%	13%
VOCATIONAL/NON-UNIVERSITY	14%	19%
SOME UNIVERSITY ATTENDANCE	6%	8%
UNIVERSITY DEGREE (S)	15%	5%
	100%	100%

Once again the sample appears to exhibit a higher level of education for respondents than for the general population, perhaps consistent with the effects of income or home ownership or the interactive effects of both.

Although it is not always possible to directly compare the sample characteristics with equivalent population characteristics, a further understanding of the respondents can be achieved through increased knowledge of the general characteristics of the study sample. The following tables provide additional details regarding the sample and are presented for information purposes.

TABLE 6
TYPE OF OWNER-OCCUPIED DWELLING

TYPE OF DWELLING	SAMPLE
SINGLE FAMILY	97%
DUPLEX	2%
MODULAR HOME	1%

Because of this information, the sample reflects those energy attitudes and practices of homeowners living in single family dwellings.

Of particular interest in this study was the approximate age of the dwelling. This is thought to have some bearing on the relative efficiency of the structure with regard to energy consumption and conservation. The following table provides the percent distribution of sample households by year of construction:

TABLE 7
HOUSEHOLD BY YEAR
OF CONSTRUCTION

YEAR OF CONSTRUCTION	PERCENT
BUILT IN 1800'S	9%
1900 - 1925	6%
1926 - 1945	12%
1946 - 1961	16%
1962 - 1974	22%
1975 - 1980	25%
1981 - PRESENT	10%
	100%

Of interest as well was the number of years the sample respondent had lived in their current home as this effects the respondents previous knowledge of energy conservation activities. A survey screening process ensured sample respondents had lived in the home for at least one year. The following table provides an indication of the length of time spent in the home by sample respondents:

TABLE 8
LENGTH OF TIME
LIVED IN HOME

YEARS IN PRESENT HOME	PERCENT
5 YEARS OF LESS	23%
6 - 10 YEARS	22%
11 - 15 YEARS	19%
16 - 25 YEARS	16%
26 YEARS OR MORE	20%

The following table presents details which may provide further insight into the energy conservation needs of New Brunswick homeowners:

TABLE 9
HOME CHARACTERISTICS

FLOORS OF LIVING SPACE:	PERCENT
ONE	32%
TWO	57%
THREE	11%
TYPE OF BASEMENT:	
FULL	78%
HALF	13%
CEMENT SLAB	4%
NO BASEMENT	5%

The following table represents the respondents "perceived" current market value of their home. Although this variable is highly subjective it provides a broad assessment of the value of the home, as perceived by the owners.

TABLE 10
CURRENT MARKET VALUE OF HOME
BY REGION

CURRENT MARKET VALUE	SAINT JOHN	MONCTON	FREDER-ICTON	NORTHERN N.B.
$50,000 OR LESS	23%	36%	32%	49%
$50,001 - 75,000	40%	42%	31%	27%
$75,001 - 100,000	22%	11%	27%	17%
$100,001 OR MORE	15%	11%	10%	7%

(2) Northern New Brunswick includes Bathurst, Chatham, Campbellton and Edmundston.

Respondents were also asked to best describe the location of their home as central city (27%),

suburban (22%) or rural (51%).

Another factor of interest regarding energy consumption was thought to be the number of people in the household. The following table describes the percent distribution of households by the number of occupants:

TABLE 11
NUMBER OF PEOPLE
IN HOUSEHOLD

HOUSEHOLD SIZE	PERCENT
ONE ONLY	7%
TWO	30%
THREE	23%
FOUR OR MORE	40%

Over one-half of all households in this sample have more than two occupants, with the average number of persons per household being 3.2.

The employment status of the male and/or the female head of the household was also determined and is summarized in the following table.

TABLE 12
EMPLOYMENT STATUS

FEMALE HEAD OF HOUSEHOLD:	PERCENT
EMPLOYED	47%
NOT EMPLOYED-OUTSIDE HOME	53%
MALE HEAD OF HOUSEHOLD:	
EMPLOYED	67%
NOT EMPLOYED	33%

The following table describes the study sample in terms of the age category of respondents:

TABLE 12A
AGE CATEGORY OF RESPONDENTS

AGE CATEGORY	PERCENT
UNDER 25	3%
25 TO 34 YEARS	17%
35 TO 44 YEARS	30%
45 TO 54 YEARS	17%
55 TO 64 YEARS	20%
65 YEARS OR MORE	13%

Having achieved a descriptive understanding of the sample, the following section will draw on this knowledge to illuminate the energy conservation practices, consumption levels and costs for New Brunswick homeowners.

ENERGY: CONSERVATION AND CONSUMPTION

In an effort to understand the future needs of New

Brunswickers with regard to energy, an assessment or inventory of past conservation activities was required. The following table reviews the current status of homes with regard to energy conservation efforts.

TABLE 13
HOUSEHOLD ENERGY CONSERVATION ACTIVITIES

CONSERVATION ACTIVITY	NOT DONE	YEAR IN WHICH ACTIVITY OCCURRED: BEFORE 1975	1976 TO 1980	1981 TO 1985	AFTER 1985
INSULATED:					
ATTIC	11%	25%	28%	29%	7%
WALLS	12%	34%	29%	20%	5%
BASEMENT	41%	18%	19%	15%	7%
WATER PIPES	63%	11%	10%	12%	4%
HEAT DUCTS	78%	6%	8%	6%	2%
HOT WATER HEATER	54%	14%	14%	12%	6%
CAULK/WEATHER STRIPPING:					
WINDOWS	58%	3%	1%	12%	26%
DOORS	56%	1%	1%	14%	28%
FLOORS	89%	1%	1%	4%	5%
FOUNDATION	85%	1%	1%	6%	7%
OUTLETS	81%	2%	1%	9%	7%
OTHER AREAS	95%	1%	-	1%	3%
EXTERIOR WORK TO REDUCE DRAFTS:	73%	5%	3%	10%	9%

Through follow-up questions the following was determined: among those survey respondents who replaced windows in their home, the majority (62%), replaced most or all of the windows for the

purpose of preventing heat loss (45%), as a part of general renovations (33%), or for a combination of these reasons (17%).

Among those respondents who had exterior work done to reduce drafts (26%), the primary activity involved adding siding to their home (16%). Other activities mentioned involved the addition of new insulation (3%), insulating foundation (2%) and repairing the roof (1%).

Although very few respondents had actually had their home air-sealed by a contractor (n=13), all but one believed the air-sealing was a somewhat or very effective way to prevent heat loss.

Focus group participants also reported fairly high levels of activity with regard to home energy conservation. The key point made in the groups, however, was that the primary motivation to conserve was the dollar savings to be realized, not the conservation of energy resources.

According to a Canadian study (Energy Consumption & Conservation Patterns in Canadian Household -

1978/79), over one-half of all Canadians had made some effort in home energy conservation. They did find, however, that as the degree of difficulty in terms of both time and money increased, the level of activity decreased.

This does not appear consistent with the behaviour of New Brunswickers - the basics of weather-stripping, water pipes and heat ducts have not been completed in many homes. Perhaps this reflects a lack of awareness of the importance of these activities.

The following table provides an indication of the heating methods and energy requirements of New Brunswick households, as identified by this research study.

TABLE 14
ENERGY CONSUMPTION
IN THE HOME

	ENERGY USED FOR:		
ENERGY TYPE	HOT WATER	PRIMARY HOME HEAT	SECONDARY HOME HEAT
ELECTRICITY	83%	37%	17%
WOOD	-	35%	24%
OIL	12%	27%	12%
PROPANE	2%	1%	-
OTHER	3%	-	1%

SAMPLE INTERPRETATION: Eighty-three percent of households in New Brunswick heat their water with electricity, 37% of homes have electricity as a primary heat source, while 17% use electricity as a back-up heat source.

According to the "Survey of Residential Fuelwood Use in New Brunswick (1984/85)", 47% of New Brunswick households used wood for the 1984-85 heating season.

This study also states that 63% of the wood-burning households use wood as a primary fuel. This very roughly translates to approximately 30% of New Brunswick households using wood as a primary fuel.

According to Statistics Canada (1981), the

principal water-heating fuel for 63% of New Brunswickers was electricity followed by oil at 30%. In 1987, Statistics Canada reports 85% of single dwellings heat their hot water electrically. This indicates a shift in recent years to electricity for the purpose of hot water heating (or a shift in means of collecting information). Among those in Baseline's sample who have changed their method of heating hot water to electricity, most had previously heated with oil.

Approximately 76% of respondents indicated they had not changed the temperature setting on their hot water in the past two years. However, 20% did lower the temperature of their hot water because it was generally too hot (42%) or to save money and energy (24%). Only 5% of respondents indicated they had raised their hot water heating temperature, with most wanting the hotter water for dishwashers or laundry.

The following table profiles the types of fuel used to supply heat in New Brunswick households:

TABLE 15
ENERGY PROFILE BY FUEL TYPE

PRIMARY FUEL	SINGLE HEAT SOURCE	SECONDARY FUEL			
		OIL	ELECTRIC	WOOD	OTHER
OIL (n=162/28%)	58%	-	15%	25%	2%
ELECTRIC (n=221/37%)	52%	1%	-	45%	2%
WOOD (n=206/35%)	26%	35%	38%	-	1%

SAMPLE INTERPRETATION: From the information in Table 15, one can make the following statement: of the 162 households using oil as a primary fuel, 59% use only oil, 15% use oil with electricity as a secondary heat, 25% use oil and wood and 2% use oil and something else.

Of those respondents who use only one heat source in their home (n=264), the most common source is electricity (44%), followed by oil (36%) and wood (20%). Among those using more than one type of fuel to heat their home, the most common combination of fuel types is electricity-wood (56%), followed by oil-wood (36%) and oil-electricity (8%). According to Statistics Canada (1981) data, 58% of owner-occupied homes used oil as a principal heating fuel, 22% electricity and 20% other types of fuel. This would suggest a significant decline in the use of oil as a primary heating fuel. Both electricity

and wood appear to be increasingly more common as a principal fuel for home heating.

In reviewing more current Statistics Canada information sources (Household Facilities & Equipment: May 1987) we find the following:

- 36% of single dwellings are using oil as a primary heat source, 39% are using electricity and 24% use wood; and

- wood is the most common form of supplementary heat, 62% of households with supplemental heat use wood, 21% electricity and 17% oil.

In this survey of owner-occupied dwellings, we observed a similar pattern of fuel use. Respondents reported that 27% use oil as a primary heat source, 37% use electricity and 35% use wood. Some variance is noted in the use of oil versus wood as a primary source of home heating fuel.

For the purpose of further analysis, households will be discussed in terms of their heating

profile as illustrated in the following table:

TABLE 16
HOUSEHOLD FUEL PROFILE

FUEL TYPE	PERCENT
OIL ONLY	15%
ELECTRICITY ONLY	16%
WOOD ONLY	9%
OIL/ELECTRICITY	4%
OIL/WOOD	17%
ELECTRICITY/WOOD	26%
OTHER COMBINATION	13%

Survey respondents were also questioned with regard to changes made to their home heating system over the past fifteen years. While 57% of respondents indicated no change had been made, the following table summarizes those home heating changes which were made by approximately 43% of New Brunswick households:

TABLE 17
CHANGES IN HOME HEATING SYSTEMS

CHANGES MADE:	PERCENT
NEW/ADDED/SWITCHED:	
WOOD HEAT SOURCE	42%
ELECTRIC HEAT	34%
OIL HEAT	13%
OTHER/NA	11%
YEAR CHANGES MADE:	
BEFORE 1975	9%
1976 - 1980	28%
1981 - 1985	43%
1986 - 1988	20%

Of those respondents who made home heating changes, an overwhelming majority (82%) believed they had reduced the amount of money spent on heating their home as a result of their effort.

One of the most basic elements of home energy conservation, due to complete user control, is household temperature. The ability to derive energy savings most likely begins with altering the heat level in the home. The following table presents an indication of household temperature patterns for different times of the day:

TABLE 18
DAILY HOUSEHOLD
TEMPERATURE PATTERNS

HOUSEHOLD TEMPERATURE	DAY	EVENING	NIGHT
BELOW 60 DEGREES F	9%	7%	19%
61 - 65 DEGREES F	14%	12%	31%
66 - 70 DEGREES F	55%	54%	39%
ABOVE 70 DEGREES F	22%	27%	11%

Further analysis of the information revealed that approximately 68% of all surveyed households participate in some form of energy conservation through their controlling of household temperature. The remaining 32% did not vary their household temperature. However, lack of

temperature variance may not necessarily mean they are not interested in conservation of energy; they may, in fact, select a lower constant temperature than would be achieved if they varied their temperature by time of day. However, according to focus group participants, the household temperature is geared to their comfort and is adjusted in order to maintain this level of comfort.

When asked if they believed their home was at a warmer, cooler or about the same temperature as it was five years ago, the following distribution of responses was obtained:

TABLE 19
HOUSEHOLD TEMPERATURE COMPARED
TO FIVE YEARS AGO

TEMPERATURE	PERCENT
WARMER NOW	14%
COOLER NOW	9%
ABOUT THE SAME	77%

It appears that the majority of households are being heated at the same temperature today as they were five years ago, with a slight trend toward a warmer household today.

Attempting to analyze heating and electrical costs per household on an annual basis required the consideration of a variety of factors; Tables 20 and 20A present estimates, as provided by respondents, for the various cost elements:

TABLE 20
ESTIMATED AVERAGE HOUSEHOLD
APPLIANCE ENERGY COSTS

HOUSEHOLD FUEL PROFILE	ANNUAL APPLIANCE COST ESTIMATE (1)	WINTER MONTHS	SUMMER MONTHS	
OIL ONLY	$660	$378	$282	
ELECTRIC ONLY	$768	N/A	$768	(1)
WOOD ONLY	$682	$402	$280	
OIL/ELECTRIC	$814	N/A	$814	(1)
OIL/WOOD	$874	$604	$270	
ELECTRIC/WOOD	$907	N/A	$907	(1)

(1) Annual Appliance Cost Estimate is the sum of the reported power bill for the summer and winter periods. Respondents estimated from 6 to 8 months as being winter cost months. In the case of homes heated by electricity, the appliance cost estimate was based on the average summer power bill only, as it was difficult to determine what proportion of the difference between reported summer and winter was due to increased appliance energy or increased heat requirements.

The following table provides an estimate of total heating costs incurred on an annual basis by average households in each of the various segments:

TABLE 20A
AN ESTIMATE OF AVERAGE HOUSEHOLD
HEATING COSTS

HOUSEHOLD FUEL PROFILE	ANNUAL HEATING COST ESTIMATES
OIL ONLY	$923
ELECTRIC ONLY	$610*
WOOD ONLY	$393
OIL/ELECTRIC	$956*
OIL/WOOD	$763
ELECTRIC/WOOD	$571*

*Electric heat costs were derived from respondent's estimates of winter and summer power bills, the difference between being attributed to heating costs. In the case where other fuels supplement electric, respondents were asked to estimate this cost directly.

Using the information in these two tables, we have constructed the following estimate of total household energy costs:

TABLE 21
AN ESTIMATE OF AVERAGE HOUSEHOLD
TOTAL ENERGY COSTS

HOUSEHOLD FUEL PROFILE	AVERAGE HOUSEHOLD COSTS		
	APPLIANCE ($)	HEAT ($)	ENERGY ($)
OIL ONLY	660	923	1,583
ELECTRIC	768	610	1,378
WOOD	682	393	1,075
OIL & ELECTRIC	814	956	1,770
OIL & WOOD	874	763	1,637
ELECTRIC & WOOD	907	571	1,478

Based on these cost estimates, respondents who heat with oil, as either a main fuel or a secondary fuel, reported higher total energy costs than respondents who heat with other fuel sources.

In reviewing Tables 20, 20-A and 21, it is urged that readers make note of the fact that the accuracy of these estimates varies because of the small sample size associated with any one fuel type. However, the annual overall average cost of energy for a household in New Brunswick is estimated to be $1,484.00. This should be a more precise estimate of energy costs. The average New Brunswick owner-occupied dwelling spends about $123 per month on energy.

The following table exhibits the respondents attitudes toward the total cost of heating their home:

TABLE 22
ATTITUDE TOWARDS HOME HEATING COSTS
BY FUEL TYPE

FUEL TYPE	VERY EXPENSIVE	SOMEWHAT EXPENSIVE	NOT VERY EXPENSIVE
OIL	27%	50%	23%
ELECTRIC	17%	58%	25%
WOOD	11%	36%	53%
OIL & ELECTRIC	22%	56%	22%
OIL & WOOD	15%	41%	44%
ELECTRIC & WOOD	16%	48%	36%
TOTAL SAMPLE	18%	48%	34%

As evidenced by the above table, those respondents using oil only or oil and electricity appear more likely to believe that the total cost of heating their home is "very expensive". Those using wood as a main or alternate energy source are most likely to claim that the cost of heating their home is "not very expensive". Given this, it appears that the perception of energy expenses are directly related to source of heat and/or the estimate of actual cost.

According to a similar study conducted in Nova Scotia, (A Survey Of Public Attitudes Towards Energy Conservation in Nova Scotia - 1987) the New Brunswick homeowners perception of heating costs is far more reasonable than that enjoyed by our

neighbours in N.S. Nova Scotians feel the cost of energy is a serious problem. Perhaps this should be expected given that New Brunswick household energy rates are significantly lower than Nova Scotia.

ENERGY CONSERVATION: ATTITUDES & POSITIONING

Having determined a number of factors related to energy conservation and consumption in the household, it is now appropriate to present information about current attitudes regarding energy in today's world. Because of changing emphasis, it is not surprising that respondents place greater importance on current issues of concern than on energy-related issues.

The following table provides an indication of the order of importance of some of today's current issues:

TABLE 23
CURRENT ISSUES OF IMPORTANCE

CURRENT ISSUE	VERY IMPORTANT	SOMEWHAT IMPORTANT	NOT IMPORTANT
JOB OPPORTUNITIES FOR YOUTH	85%	14%	1%
RATE OF UNEMPLOYMENT	85%	12%	3%
FOREST INDUSTRY	79%	20%	1%
WATER POLLUTION	68%	28%	4%
AIR POLLUTION	61%	32%	7%
FUTURE ENERGY NEEDS	54%	39%	7%

After rating the relative importance of each issue independent of the other, respondents were asked which they felt was the most important New Brunswick issue.

The following table illustrates the range of survey responses:

TABLE 24
ISSUE OF MOST IMPORTANCE
TO NEW BRUNSWICK HOMEOWNERS

ISSUE	PERCENT
UNEMPLOYMENT	46%
JOB OPPORTUNITIES FOR YOUTH	24%
FOREST INDUSTRY	18%
WATER POLLUTION	6%
AIR POLLUTION	5%
FUTURE ENERGY NEEDS	1%

In New Brunswick the number one issue of concern is, and has been for a considerable period of time, the general topic of unemployment, followed

by job opportunities for youth. Respondents also recognize the importance of the forest industry to New Brunswick. However, there appears to be little priority given to future energy needs. This is quite likely the result of a relaxed attitude toward energy conservation due to an apparent stabilization of supply and price in this industry as compared to the uncertainty during the energy crisis years.

Interestingly, the attitude towards energy as a social issue as measured in 1978 (Energy Consumption & Conservation Patterns in Canadian Households) revealed that the cost of energy was ranked above unemployment and pollution at that time. There was, however, little support for the energy shortage issue even at that time.

The following tables are provided to demonstrate the views on these issues among different subgroups of the survey sample. Because there does not appear to be any significant difference among subgroups of the rank order of importance of each of these issues, these are presented for information purposes only.

TABLE 25
MOST IMPORTANT NEW BRUNSWICK ISSUE

	*ISSUE OF IMPORTANCE 1	2	3	4	5	6
GEOGRAPHIC LOCATION:						
NORTHERN N.B.	53%	3%	-	19%	6%	19%
MONCTON	55%	-	1%	27%	3%	14%
FREDERICTON	52%	6%	1%	22%	4%	15%
SAINT JOHN	28%	11%	3%	26%	9%	23%
LANGUAGE SPOKEN IN HOME:						
ENGLISH	50%	5%	1%	22%	3%	19%
FRENCH	35%	7%	1%	31%	10%	16%
TYPE OF LOCATION:						
CENTRAL	47%	5%	4%	21%	5%	18%
SUBURBAN	48%	7%	2%	24%	4%	15%
RURAL	45%	5%	-	24%	6%	20%
TYPE OF DWELLING:						
FULL BASEMENT	44%	5%	1%	23%	5%	22%
HALF/SLAB/NONE	41%	6%	2%	23%	5%	23%
FLOORS OF LIVING SPACE:						
ONE	47%	7%	2%	27%	3%	14%
TWO	45%	5%	1%	22%	6%	21%
THREE	59%	4%	-	19%	7%	11%
YEARS IN HOME:						
10 OR LESS	48%	7%	3%	20%	5%	17%
11 - 25 YEARS	45%	3%	-	29%	6%	17%
26 PLUS	44%	5%	-	25%	5%	21%

NOTE: *1=UNEMPLOYMENT, 2=WATER POLLUTION, 3=FUTURE ENERGY NEEDS, 4=JOB OPPORTUNITIES FOR YOUTH, 5=AIR POLLUTION, 6=FOREST INDUSTRY.

	ISSUE OF IMPORTANCE					
	*1	2	3	4	5	6
MARKET VALUE OF HOME:						
$50,000 OR LESS	38%	5%	4%	23%	3%	27%
$50,000 - 75,000	50%	7%	1%	21%	7%	14%
$75,000 OR MORE	56%	4%	-%	19%	7%	14%
LEVEL OF EDUCATION:						
LESS THAN H.S.	41%	4%	-	32%	5%	18%
HIGH SCHOOL GRAD	53%	7%	4%	12%	4%	20%
SOME POST SECON.	47%	8%	2%	22%	5%	16%
UNIV GRAD PLUS	48%	2%	-	23%	8%	19%
EMPLOYMENT STATUS:						
FEMALE:						
EMPLOYED	55%	4%	2%	16%	4%	19%
NOT EMPLOYED	41%	5%	1%	29%	6%	18%
MALE:						
EMPLOYED	52%	5%	2%	22%	5%	14%
NOT EMPLOYED	36%	5%	1%	24%	4%	30%
NUMBER OF PEOPLE IN HOUSEHOLD:						
TWO OR LESS	52%	5%	-%	21%	3%	19%
THREE OR MORE	44%	6%	2%	24%	7%	17%
TOTAL HOUSEHOLD INCOME:						
$20,000 OR LESS	38%	3%	2%	33%	5%	19%
$20,001 TO 30,000	45%	6%	2%	22%	6%	19%
$30,001 OR MORE	54%	5%	1%	19%	5%	16%
SEX OF RESPONDENT:						
MALE	41%	6%	2%	18%	6%	27%
FEMALE	51%	3%	1%	31%	5%	9%
AGE OF RESPONDENT:						
UNDER 35	48%	6%	5%	15%	3%	23%
35 TO 54	49%	5%	1%	24%	7%	14%
55 PLUS	41%	5%	-	28%	4%	22%

NOTE: *1=UNEMPLOYMENT, 2=WATER POLLUTION, 3=FUTURE ENERGY NEEDS, 4=JOB OPPORTUNITIES FOR YOUTH, 5=AIR POLLUTION, 6=FOREST INDUSTRY.

The issue of energy costs is best evaluated in relation to other everyday household costs. The following table is intended to illustrate how New Brunswick homeowners perceive the expense of some selected household costs:

TABLE 26
PERCEIVED EXPENSE OF
HOUSEHOLD COSTS

HOUSEHOLD COST	VERY EXPENSIVE	SOMEWHAT EXPENSIVE	NOT VERY EXPENSIVE
COST OF GASOLINE	59%	30%	11%
COST OF FEEDING FAMILY	40%	51%	9%
PROPERTY TAXES FOR HOME	40%	41%	19%
COST OF ELECTRICITY (LESS HEAT)	23%	46%	31%
COST OF HEAT FOR HOME	18%	45%	37%
COST OF MORTGAGE	21%	42%	37%

Based on the information in Table 26 one can see that New Brunswickers are most concerned about the costs of gasoline, food and property taxes. This might suggest that direct and frequent costs (food and gasoline) cause the most concern because they are most visible and because they are essential costs. Perhaps because they are directly taxed - they actually see the amount of the tax - people are also very concerned about property tax. When asked to select that one cost which is of most concern to them daily, the following results were obtained:

TABLE 27
COST OF MOST CONCERN
TO N.B. HOMEOWNERS

HOUSEHOLD COSTS	PERCENT
FOOD	47%
GASOLINE	18%
MORTGAGE	10%
PROPERTY TAXES	10%
HEAT	10%
ELECTRICITY	5%

The majority of homeowners believe that food is their number one cost concern today. Both heat and electricity are costs of primary concern to relatively few homeowners.

In assessing whether there are any unique characteristics about those individuals who are concerned about these different items, Table 28 was prepared. This illustrates the cost of most concern by demographic segments.

TABLE 28
COST OF MOST CONCERN
BY DEMOGRAPHIC SUBGROUP

	COST OF MOST CONCERN (1)					
	*1	2	3	4	5	6
GEOGRAPHIC LOCATION (2):						
NORTHERN N.B.	47%	11%	5%	10%	11%	16%
FREDERICTON	51%	6%	7%	6%	8%	22%
MONCTON	47%	12%	2%	13%	10%	16%
SAINT JOHN	50%	11%	4%	7%	9%	19%
LANGUAGE SPOKEN IN HOME:						
ENGLISH	51%	8%	5%	8%	5%	23%
FRENCH	46%	12%	7%	11%	13%	11%
TYPE OF LOCATION:						
CENTRAL	43%	9%	5%	11%	16%	16%
SUBURBAN	49%	18%	3%	7%	9%	14%
RURAL	49%	7%	5%	9%	7%	23%
TYPE OF DWELLING:						
FULL BASEMENT	46%	9%	5%	9%	10%	21%
HALF/SLAB/NONE	54%	11%	5%	9%	9%	12%
FLOORS OF LIVING SPACE:						
ONE	52%	8%	3%	9%	10%	18%
TWO	48%	10%	6%	9%	10%	17%
THREE	45%	13%	-	11%	9%	22%
YEARS IN HOME:						
10 OR LESS	48%	15%	5%	5%	7%	20%
11 - 25 YEARS	45%	8%	4%	12%	13%	18%
26 PLUS	51%	1%	6%	15%	10%	17%

(1) NOTE: *1=FOOD, 2=MORTGAGE, 3=ELECTRICITY LESS HEAT, 4=HEAT, 5=PROPERTY TAXES, 6=GASOLINE.

	COST OF MOST CONCERN (1)					
	*1	2	3	4	5	6
MARKET VALUE OF HOME:						
$50,000 OR LESS	49%	6%	7%	12%	9%	17%
$50,000 - 75,000	47%	15%	4%	7%	9%	18%
$75,000 OR MORE	44%	17%	3%	7%	11%	18%
LEVEL OF EDUCATION:						
LESS THAN H.S.	51%	6%	6%	8%	12%	17%
HIGH SCHOOL GRAD	51%	13%	4%	11%	7%	14%
SOME POST SECON.	39%	9%	5%	8%	11%	28%
UNIV GRAD PLUS	43%	18%	2%	10%	10%	17%
EMPLOYMENT STATUS:						
FEMALE:						
EMPLOYED	44%	16%	4%	7%	11%	18%
NOT EMPLOYED	54%	4%	4%	11%	8%	19%
MALE:						
EMPLOYED	48%	13%	3%	6%	9%	21%
NOT EMPLOYED	45%	4%	6%	12%	12%	21%
NUMBER OF PEOPLE IN HOUSEHOLD:						
TWO OR LESS	40%	8%	5%	12%	12%	23%
THREE OR MORE	53%	11%	4%	7%	8%	17%
TOTAL HOUSEHOLD INCOME:						
$20,000 OR LESS	54%	5%	5%	11%	9%	16%
$20,001 TO 30,000	49%	12%	3%	4%	11%	21%
$30,001 OR MORE	41%	14%	6%	7%	10%	22%
SEX OF RESPONDENT:						
MALE	41%	9%	5%	9%	10%	26%
FEMALE	55%	10%	5%	9%	10%	11%
AGE OF RESPONDENT:						
UNDER 35	46%	15%	7%	5%	9%	18%
35 TO 54	46%	13%	4%	8%	7%	22%
55 PLUS	51%	3%	5%	13%	16%	12%

(1) NOTE: *1=FOOD, 2=MORTGAGE, 3=ELECTRICITY LESS HEAT, 4=HEAT, 5=PROPERTY TAXES, 6=GASOLINE.

Information on attitudes, as they relate specifically to energy conservation, were also measured. The following table illustrates the respondent's level of concern with reducing energy consumption in the home and their perception of friends' attitudes on this subject:

TABLE 29
ATTITUDE TOWARD ENERGY CONSERVATION

	LEVEL OF CONCERN		
	VERY	SOMEWHAT	NOT VERY
PERSONAL CONCERN	35%	46%	19%
FRIEND'S CONCERN	35%	54%	11%

Table 29 indicates that people see others as having the same or a somewhat higher level of concern regarding energy conservation as they do personally.

The issue of energy seems to be of relatively low priority to New Brunswick homeowners, certainly as it relates to other economic and social issues, as previously discussed. However, it was interesting to note that 47% of respondents indicate they are more concerned now than they were five years ago with the issue of energy. Similarly, 47% believe they have the same level of concern and only 6%

report they are less concerned.

The general attitudes of New Brunswick homeowners regarding energy conservation and the cost of energy appear to be somewhat related. The issue of energy conservation is of little concern today in comparison to other social issues. It is quite likely that the priority given this issue will not rise until such time as the cost becomes of greater concern to New Brunswick homeowners.

FUTURE ENERGY CONSERVATION ACTIVITIES

In addition to gaining an assessment of prior energy conservation activities among New Brunswick homeowners, it is equally important to gain an understanding of future activities.

The following table summarizes respondents reports of future energy conservation activities:

TABLE 30
FUTURE ENERGY
CONSERVATION ACTIVITIES
(n=602)

CONSERVATION ACTIVITY	PERCENT OF TOTAL
PLAN TO ADD INSULATION	30%
PLAN TO REPLACE DOORS/WINDOWS	38%
PLAN TO CAULK/WEATHERSTRIP	43%
PLAN TO CHANGE METHOD OF HOT WATER HEAT	6%

A healthy percentage of households appear to be entertaining the possibility of actively conserving energy through caulking, insulating or replacing doors and/or windows. Forty-eight percent of all respondents indicated they would be undertaking one or more of the above energy conservation activities.

Respondents were asked about the perceived level of effectiveness associated with each energy conservation effort. Views are summarized in the following table:

TABLE 30A
PERCEIVED EFFECTIVENESS OF ENERGY CONSERVATION EFFORTS

	VERY EFFECTIVE	SOMEWHAT EFFECTIVE	NOT VERY EFFECTIVE
INSULATION	83%	16%	1%
REPLACING DOORS & WINDOWS	66%	29%	5%
CAULK/WEATHERSTRIP	61%	36%	3%
EXTERIOR WORK	48%	41%	11%

As evidenced by the above table, insulation is seen as being the most effective way to reduce heat loss in the home. This was also reported by focus group participants as the best way to reduce energy use in the home. As evidenced in other studies, the need for caulking/weatherstripping in areas other than doors & windows is not widely recognized. Interesting as well, was the conclusion drawn in the Canadian Energy Study which suggested that while respondents claimed relatively high levels of conservation knowledge, in actual fact the knowledge level was low.

Survey respondents were also questioned with regard to any planned home heating changes over the next two years. Although the majority, (89%), do not plan any activity, those who do are most likely to switch from oil to electric heat or add

some supplemental electric heating. Also popular is the use of wood stoves as a supplementary form of heat for the home. The changes anticipated are being undertaken primarily to save heating costs (37%) or to provide a more efficient heating system (24%). It was interesting to note among focus group participants that although wood was a secondary form of heat supply for many, the inconvenience of using wood was seen as a deterrent to frequent or continued use. Many reported that it was just not worth the small savings to bother with wood.

ENERGY CONSERVATION: KNOWLEDGE AND AWARENESS

Integral to the basic effort of encouraging residential energy conservation activities among homeowners are awareness and education. A number of programs have been offered through the years to homeowners in order to encourage conservation efforts. The survey presented respondents with a variety of these programs in order to assess the level of familiarity with each. The following table indicates the results of these questions:

TABLE 31
AWARENESS OF ENERGY PROGRAMS

	LEVEL OF FAMILIARITY			
ENERGY PROGRAMS	VERY	SOMEWHAT	NOT VERY	FIRST HEARD OF
R2000 PROGRAM	8%	19%	27%	46%
HOME ENERGY LOANS	11%	25%	41%	23%
CHIP GRANT	7%	14%	27%	52%
OTHER ENERGY PROGRAMS	4%	10%	86%	-

There appears to be little overall awareness of energy programs. Among those programs mentioned, the "Home Energy Loans" appear to be enjoying the highest level of awareness with homeowners, and yet 64% of respondents claim to be unfamiliar with this program.

Further exploration of energy program awareness

and information revealed that only 26% of surveyed households received some form of grant, loan or information to help make their home more energy efficient.

TABLE 32
ENERGY PROGRAMS USED

GRANTS/PROGRAMS USED	PERCENT
NONE	73%
NB POWER	9%
CHIP	5%
NB HOUSING	3%
GOVERNMENT - GENERAL	5%
UFFI	1%
OTHER	1%
INFORMATION ONLY	3%

Generally, over one-half of all grant/loan recipients (54%), used the money to add home insulation. Other activities involved were:

Conversion to/Addition of Electric Heat - 14%
Install Doors/Windows - 11%
Conversion to/Addition of Wood Heat - 9%

Given that only 27% of New Brunswick homeowners claimed to have used, or received information from, energy-related programs, it is suggested that the relevance or effectiveness of these programs should be questioned.

The following table indicates the percent

distribution of dollars received through grants or loans by program participants:

TABLE 33
MONEY RECEIVED THROUGH PROGRAM
(LOAN/GRANT RECIPIENTS ONLY)
(n=133)

	PERCENT
$500 OR LESS	32%
$501 - 1000	29%
$1001 - 2000	17%
$2001 OR MORE	22%

Respondents believed that if the government wanted to get people to do more to conserve energy, the best way to do this would be to...

1) Provide grants/loans 37%
2) Provide energy education programs via school system 31%
3) Give advice on how to save money on heating costs 23%
4) Other mentions 9%

The responsibility for energy conservation, according to the Canadian Energy Study, was perceived to be that of business and government. However, a preference was noted among those surveyed for government programs that minimized the direct impact of regulation on people.

Although financial assistance appears important as

a means of encouraging conservation, information, which is the essential element of both education and advice, is of equal if not more importance in this matter.

The popularity of government sponsored education seminars on home energy conservation was noted in both the Canadian study and the Nova Scotian study.

Focus group participants suggest that efforts to reduce the inefficient use of energy within homes should be the major conservation activity. The majority believed that if they could just use energy more efficiently they would derive considerable savings.

Although people believe that grants and loans are an effective means of encouraging conservation, the following indicates a reluctance on the part of respondents to assume a loan in order to complete these desired activities:

TABLE 34
LIKELIHOOD OF APPLYING
FOR AN ENERGY LOAN

LIKELIHOOD	PERCENT
VERY LIKELY	8%
SOMEWHAT LIKELY	14%
NOT VERY LIKELY	78%

Among those not likely to apply for an energy loan, a variety of reasons were cited. Approximately one-third (33%) said that they did not need or want to make energy improvements in their home. A further 15% indicated they could not afford to borrow the money and some stated they just do not like or understand loans.

For those respondents who were very or somewhat likely to apply for an energy loan, 30% would insulate, 30% would add or replace doors/windows and 13% would convert to electric heat.

Focus group participants appeared somewhat more leery of the grant and loan programs. They expressed some concern over whether, as taxpayers, they would end up paying for it in the long run and, if so, they weren't sure it was a good way to spend their tax dollars. Some also indicated that

they believed the grants and loans were serving only the contractors because prices seemed higher during the time these programs were in effect. As well, they indicated that the grants and loans did not apply to those who wish to undertake the job themselves.

Related to this general subject area, each survey participant was asked to rate their home in terms of its energy efficiency. Table 35 presents the distribution of responses by rating category:

TABLE 35
ENERGY EFFICIENCY RATING OF HOME

RATING	PERCENT
AS EFFICIENT AS POSSIBLE	24%
NOT TOTALLY EFFICIENT BUT BETTER THAN BEFORE	66%
NOT REALLY VERY EFFICIENT	10%

It would appear that homeowners are generally satisfied with their homes energy efficiency and believe they are now better conservers than they were.

In a similar vein, the Nova Scotia Energy Study found that homeowners didn't perceive their home to be in need of any energy conservation measures

that would be cost effective.

Among those respondents who believe there is room for improvement in the area of energy efficiency in the home, the following table lists their desired areas of conservation activity:

TABLE 36
MEANS OF INCREASING
ENERGY EFFICIENCY

ACTIVITY	PERCENT
WINDOWS/DOORS	24%
INSULATION	23%
NEW SIDING	4%
OTHER	10%
NO ACTIVITY	39%

Generally, financial considerations appear to be the underlying barrier in preventing these activities from occurring; 68% indicated that, while they would like to conduct these conservation activities, they do not have the money to do so at the present time. Lack of time and interest were also reasons cited for not doing these things.

In terms of obtaining information regarding energy conservation in the home, the best source of this

information was seen to be NB Power (47%). Other sources mentioned were building contractors (18%), government - federal and provincial, (18%), and conservation groups (9%).

Approximately 46% of surveyed households indicate they have, at some time, received information about energy use in the home. The type of information received was primarily on conservation or insulation, with the main supplier of information being NB Power. Some focus group participants reported getting energy information at local Home Shows. A further question regarding the type of energy information they would like to receive revealed the following:

TABLE 37
INFORMATION OF INTEREST

INFORMATION	PERCENT
INSULATION/CAULKING	41%
SAVE MONEY/ENERGY GENERAL	31%
DOORS/WINDOWS/SIDING	17%
EFFICIENCY	16%
ELECTRIC HEAT	10%
GRANTS & LOANS AVAILABLE	9%
OTHER MISCELLANEOUS	26%

According to the Nova Scotia Energy Study, the respondents stated the government publications,

especially brochures and pamphlets, had a high degree of credibility.

The focus groups revealed a number of concerns among participants about the quality of the air in their home as a result of their heat conversions and conservation efforts eliminating air infiltration. They suggested that better information should be available informing homeowners of the possible effects on the house due to the use of alternate energy sources, such as electricity and wood, including the problems with either high humidity or lack of humidity and the differing quality of heat and air flow.

The following table provides a breakdown of respondent's perceptions concerning the way in which energy conservation information could best reach homeowners.

TABLE 38
INFORMATION DISTRIBUTION METHODS

DISTRIBUTION METHOD	PERCENT
WITH POWER BILL	51%
RADIO/TELEVISION	18%
WRITTEN MATERIAL	17%
NEWSPAPER	8%
TOLL FREE NUMBER	6%

According to homeowners, the distribution of information regarding energy conservation would seem to be most effectively handled through enclosures with the monthly power bill. This is an obvious choice of information dissemination for NB Power as it provides a relatively economical means of communicating with all customers in their service area. As well, it was suggested by focus group participants that information currently available at the NB Power office should also be available at bill payment agencies. However, we would note that the use of NB Power as a source of information is perhaps as much because of familiarity as anything else. It was suggested, however, by focus group participants that NB Power mail-outs are not exceedingly effective. People seem to recall seeing them, but not necessarily what the message was. In the focus groups some also questioned the possible conflict of interest between the emphasis on electric heat conversion and future sales for NB Power.

According to respondents, the role of the government in the area of energy conservation should be an active one, one of initiator and

implementer. Government's role, in energy conservation activities is important to the people of New Brunswick. The following table suggests an equally important role for both the federal and provincial governments in energy conservation:

TABLE 39
ROLE OF GOVERNMENT
IN ENERGY CONSERVATION

RATING	PROVINCIAL	FEDERAL
VERY IMPORTANT	70%	68%
SOMEWHAT IMPORTANT	22%	23%
NOT VERY IMPORTANT	8%	9%

While the quantitative study and focus groups both explored the topic of communicating energy information, clear suggestions or patterns have not emerged. Respondents tended to suggest what has been in place and not imagine what could be in place. This has, perhaps, resulted from the low level of interest in the topic. Also, people do not seem to have a wide range of questions related to energy issues. Reference to Appendix B will, however, provide an indication of some of the questions identified through the focus group research.

CONCLUSIONS

The purpose of this research study was to provide an up-to-date assessment of current public opinion on issues and practices related to energy conservation in New Brunswick.

Through the process of analysis the following conclusions have been reached as they relate specifically to the objectives set forth in this study.

It has been made fairly apparent by New Brunswick homeowners that they perceive the cost of energy to be reasonable, particularly in comparison to other household expenses. Gasoline, however, remains an energy cost of some concern. Energy conservation, with respect to other social or economic issues, appears to be a low priority with homeowners. As long as the cost of energy is perceived to be reasonable, conservation will likely continue to rank low in terms of household priorities or concerns.

The primary factor underlying this lack of interest in conservation is undoubtedly financial in nature. The cost of undertaking energy conservation activities

such as insulation, electric heat conversion and replacement of doors and windows, in relation to the perceived savings, is preventing these energy and money-saving improvements from taking place. Because energy costs for the home are perceived as being more reasonable than other costs, homeowners are not willing to invest the money to save more. In the future it is likely that most conservation activities are going to be undertaken primarily as the result of general home renovations. This would perhaps suggest that energy conservation activities for the sake of conservation will be limited until such time as the cost or supply of energy once again becomes an issue.

Thirty percent of all respondents would like to receive further information on how to conserve energy and save money in the home. In general, respondents seem to have quite a bit of knowledge about making their homes energy-efficient. Many have converted or upgraded their heating systems, insulated attics, in some cases walls, and caulked or weather-stripped windows. However, many have not insulated cellars, water pipes, heaters or duct work. The initial stages of educating the public seem reasonably effective. It is interesting to note, however, that less than

one-half of all participants claimed or recalled receipt of information on energy conservation. Thirty percent of all respondents would like to receive further information on how to conserve energy and save money in the home.

The current level of knowledge exhibited by homeowners regarding programs offered to conservationists was relatively low. It would appear that information needs are a barrier in that people are generally not aware of the programs offered to encourage conservation activities. As well, it would seem that knowledge of methods to conserve are limited to the traditional ones such as insulation, electric heat conversion, and replacement of doors and windows. Because fewer homeowners are requiring this type of work, additional methods of conserving should be promoted.

The primary sources of information on energy conservation were thought to be NB Power, other government agencies and building contractors. An inventory of the types of information people would like to receive revealed that most information requested was about home insulation, caulking and

weatherstripping or about how to save money by saving energy. The best way to distribute information on energy conservation was seen to be with the electric bill.

The major areas of participation in energy conservation activities have been exterior surface insulation, caulking and weatherstripping, doors and windows, changes to home heating methods (e.g. conversion to electric, addition of wood fueled heat source), household temperature control and exterior work (e.g. added siding) to reduce drafts. The majority of these activities have been undertaken in the past fifteen years and were likely in response to the energy crisis of the early 1970's. Door and window replacement activities were generally done to reduce heat loss although it was just as often a part of general renovations.

Although a number of households indicate they plan to start energy conservation projects in their home over the next two years, this must be tempered to reflect a realistic percentage of those who will actually do as they have indicated. The energy conservation activities planned are primarily of the same nature as

those which have been undertaken to date.

For those respondents anticipating a change in their home heating method in the future, most are likely to switch to electric heat or use wood as a supplementary fuel in home heating. The primary motivation of home heating changes are to save money and provide a more efficient heating system.

The role of government, both federal and provincial, in promoting energy conservation was seen as important, albeit undefined, by the majority of homeowners. Although public priority does not currently lie with energy conservation in terms of major household expenditures, the issue is still considered to be one of public interest.

The future design of energy conservation programs in New Brunswick is a challenge. Increasing the homeowners knowledge of energy saving methods and the resulting benefits of such efforts must be accomplished subtly and with credibility. Awareness is critical to understanding and people must learn to understand energy before they can effectively manage this resource in their own home.

Involvement in major conservation activities, specifically for the purpose of conservation which requires significant financial investment, will likely be limited until such time that energy costs once again become an issue of relatively high priority.

Given the decline in perceived importance of energy conservation and the view that the costs of energy are reasonable, there is little motivation for participation in energy conservation activities. However, with continual efforts to make the public aware of the need to use energy efficiently, and with promotional efforts also directed at builders/contractors and others, people in New Brunswick will continue to be encouraged to use energy efficiently.

APPENDIX A

BASELINE MARKET RESEARCH (506) 458-8137
MARKET ANALYSIS: ENERGY CONSERVATION BOOK _____

BMR 198802 JANUARY, 1988

RESP NO ___ ___ ___ ___

TELEPHONE	INTER-VIEWER	CALL DATE	CALL TIME	CALL NUMBER	REMARKS

Hello, I'm _____calling from Baseline Market Research in Fredericton. We are conducting a survey about home heating in New Brunswick and we'd really appreciate your help. Because this study must involve certain types of homes I need to first ask....

A.1 If the home in which you live is owned by you or someone else in your household?
YES..RESPONDENT AND/OR SPOUSE OR OTHER FAMILY MEMBER OWNS HOUSE.
NO...RENTAL UNIT --THANK AND DISCONTINUE

A.2 In what type of home do you live:
1. a single family home
2. a duplex or two family house
3. a modular home
4. a mobile or mini home.
5. an apartment house...that is a building with more than two apartments.
6. a town house
7. or some other type of home...what is that_____

A.3 In what year, approximately, was your home built?
19 ___ ___

ELIGIBILITY CHECK: HOUSEHOLD IS ELIGIBLE IF IT IS A SINGLE FAMILY, DUPLEX OR MODULAR HOME BUILT DURING OR BEFORE 1986 AND OWNER OCCUPIED...IF ELIGIBLE CONTINUE...IF NOT ELIGIBLE THEN THANK AND DISCONTINUE.

According to the research method being used, I now have to ask to speak with the person in your home who is most familiar with the types of heating fuels used and the overall energy efficiency of your home...would that be you?

YES....CONTINUE

NO...ASK IF AVAILABLE...GET CALL BACK IF NOT...IF AVAILABLE EXPLAIN PROJECT AND CONTINUE...NOTE ANY NECESSARY COMMENTS IN SPACE ABOVE (I.E. REFUSAL OR NOT AVAILABLE).

This is a survey to help us understand how people in New Brunswick feel about some energy issues. We will also be asking some questions about home heating and weatherization. Your household is one of a limited number selected from throughout the province. We'd really appreciate your cooperation in this study. We do hope that you take the time to think about each question and answer each one as honestly as possible. All your answers are confidential....if you don't want to answer any question, just say so and I will move on to the next one. We want to begin with a few general points.....

RESP £ (1-4) ___ ___ ___ ___

TEL EXC (5-7) ___ ___ ___

INTERV. LANG (8)
ENGLISH.....1

FRENCH.....2

TYPE OF DWELLING
ENTER CODE (9)....____

YR.CONSTR. (10-11) ___ ___

Q.1. We are interested in finding out how important or unimportant some issues will be to the future of New Brunswick Based on your experience...(REPEAT POINT) do you think that (READ EACH PROBLEM) will be a very important...somewhat important...or not very important issue for New Brunswickers (SKIP EVERY SECOND READ) over the next five years

			VERY IMP.	SOME IMP.	NOT IMP.	D.K.	REF	N.A.
a.	the rate of unemployment	(12)	1	2	3	7	8	9
b.	water pollution	(13)	1	2	3	7	8	9
c.	future energy needs	(14)	1	2	3	7	8	9
d.	job opportunities for youth	(15)	1	2	3	7	8	9
e.	air pollution	(16)	1	2	3	7	8	9
f.	the future of the forest industry	(17)	1	2	3	7	8	9

Q.2 Of these issues (REPEAT EACH)...which one do you think will be most important to the people of New Brunswick over the next five years?

_____(18-19)___ ___

NONE OF THEM.....95

D.K./NO OPINION.....97

REF.....98

N.A.....99

Q.3 Are there any other issues related to energy and natural resources that you think will become very important to the people of New Brunswick over the next five years...(IF YES...What is that?)

_____(20-21)___ ___

NO OTHER ISSUE.....95

D.K./NO OPINION.....97

REF.....98

NA.....99

Q.4 Now, we'd like to know how your reactions to some of the costs of running your home today...do you think that (ITEM) is ..FOR SECOND AND FUTURE ITEMS USE: is (ITEM) very expensive... somewhat expensive ..not very expensive...or not at all expensive.

		VERY EXP	SOME EXP	NOT VERY EXP	NOT AT ALL EXP	DK	REF/ N.A.	NOT APPR.
a. the cost of feeding you and your family	(22)	1	2	3	4	7	9	0
b. the cost of your mortgage	(23)	1	2	3	4	7	9	0
c. the cost of electricity for your home, excluding heat	(24)	1	2	3	4	7	9	0
d. the cost of heating your home	(25)	1	2	3	4	7	9	0
e. the cost of property taxes on your home	(26)	1	2	3	4	7	9	0
f. the cost of gasoline for your car	(27)	1	2	3	4	7	9	0

Q.5 Thinking about these different costs, which one, if any, is of the most concern to you in your day-to-day life...the cost of food...your mortgage...the cost of heating...the cost of electricity...property taxes or the cost of gasoline for your car?

_____(28-29)___ ___

NONE OF THE COSTS.....95

D.K./NO OPINION.....97

REF.....98

N.A.....99

Q.6 Based on your experiences...would you say that you are very concerned...somewhat concerned...or not very concerned with reducing the amount of energy used in your home today?

VERY CONCERNED.....(30).....1

SOMEWHAT CONCERNED.....2

NOT VERY CONCERNED.....3

D.K./NO OPINION.....7

REF.....8

N.A.....9

Q.7 How about your friends.. would you say that they are very concerned...somewhat concerned...or not very concerned with reducing the amount of energy used in their homes today?

VERY CONCERNED.....(31).....1

SOMEWHAT CONCERNED.....2

NOT VERY CONCERNED.....3

D.K./NO OPINION.....7

REF.....8

N.A.....9

Q.8 Compared to five years ago..do you think that you are more concerned about energy issues today...less concerned about energy issues...or are your concerns about the same today as they were then?

MORE CONCERNED.....(32).....1

SAME LEVEL OF CONCERN.....2

LESS CONCERNED.....3

D.K./NO OPINION.. 7

REF.....8

N.A.....9

Now we want to ask a few questions about some things you may have done to winterize your home.....

Q. 9 First of all....are/is the (READ EACH) in your home insulated...CHECK IF YES.. AND THEN GO BACK TO EACH POINT AND ASK: in what year was/were the (ITEM) insulated?

		CHECK		ENTER YEAR	NOT DONE	D.K.	REF.	N.A.
a.	attic	____	(33-34)	19__ __	00	97	98	99
b.	walls	____	(35-36)	19__ __	00	97	98	99
c.	basement	____	(37-38)	19__ __	00	97	98	99
d.	water pipes	___	(39-40)	19__ __	00	97	98	99
e.	heat ducts	___	(41-42)	19__ __	00	97	98	99
f.	hot water heater	___	(43-44)	19__ __	00	97	98	99

Q. 10 Have you purchased any storm windows or doors for your home in the past five years?

WINDOWS ONLY..... (45)..1
DOORS AND WINDOWS.....2 — GO TO Q.10A

DOORS ONLY.....3
NEITHER.....4
DK.....7
REF.....8 — GO TO Q. 11
N.A.....9

Q.10A Did you replace most, some or only a few of the windows in your home?

MOST/ALL.....(46)....1

SOME.....2

FEW.....3

D.K.....7

REF.....8

N.A.....9

NOT APPRO.....0

Q. 10B Were these windows replaced as part of a home renovation project ..to prevent heat loss...or what

RENOVATIONS.....(47)....1

PREVENT HEAT LOSS.....2

BOTH.....3

OTHER(_____)...4

D.K.....7

REF.....8

N.A.....9

NOT APPRO.....0

Q. 11 Have you done any caulking and weather-stripping in your home in the last five years?

NO.....(48)..2

D.K.....7

REF.....8

N.A.....9

GO TO Q.12

YES.....1 →

Q. 11.. Have you done any caulking or weather-stripping (READ EACH AND CHECK AS APPROPRIATE)....THEN IF YES..in what year did you caulk/weather-strip the (READ ITEMS)

	CHECK	ENTER YEAR	NOT DONE	D.K.	REF.	N.A.
a. around windows	___(49-50)	19__ __	00	97	98	99
b. around doors	___(51-52)	19__ __	00	97	98	99
c. around baseboard and floors	___(53-54)	19__ __	00	97	98	99
d. along the top of your foundation	___(55=56)	19__ __	00	97	98	99
e. around electrical outlets	___(57-58)	19__ __	00	97	98	99
f. around any other areas in your home. SPECIFY:_____	___(59-60)	19__ __	00	97	98	99

Q.12 In the last five years have you had any contractor or firm air seal your home in order to help reduce heat loss?

YES.....(61).....1

NO.....2

D.K.....7 | GO TO Q.13

REF.....8 | GO TO Q.13

N.A.....9 | GO TO Q.13

Q.12A Would you say that air sealing is a very effective ...somewhat effective or not very effective way of preventing heat loss?

VERY EFFECTIVE.....(62).....1

SOMEWHAT EFFECTIVE.....2

NOT VERY EFFECTIVE.....3

D.K.....7

REF.....8

N.A.....9

NOT APPROPRIATE.....0

Q.13 Have you done any work to the exterior of your home to reduce drafts? IF YES.....what work have you done? In what year was this done?

_____

_____ (63-64)___ ___

NO WORK DONE.....95

D.K.....97

REF.....98

N.A.....99

YEAR IF WORK.....(65-66)___ ___

D.K.....97

REF.....98

N.A.....99

NOT APPROPRIATE.....00

Q.14 On average, at what temperature do you usually keep your home...

		DEGREES	D.K.	REF	N.A.
a. during the daytime	(67-68)	___ ___	97	98	99
b. during the evenings	(69-70)	___ ___	97	98	99
c. overnight	(71-72)	___ ___	97	98	99

INTERVIEWER: IF Q.14A, 14B OR 14C ARE NOT THE SAME..CIRCLE '1' ELSE CIRCLE '2'

HOUSEHOLD VARIANCE.....(73)...1

NO VARIANCE.....2

Q. 15 Do you keep the temperature of your home warmer ...cooler or at about the same level as you did five years ago (IF R. LIVED SOMEWHERE ELSE JUST ASK: well, in general)

WARMER.....(74)...1

COOLER.....2

THE SAME.....3

D.K.....7

REF.....8

N.A.....9

Q.16 How is the hot water for your home heated....by oil..propane gas...electricity or something else?

OIL.....(75)....1

PROPANE.....2

ELECTRICITY.....3

OTHER (SPECIFY)_____.4

NO HOT WATER.....5

D.K.....7

REF.....8

N.A.....9

GO TO Q.17

Q.16a Did you ever heat your hot water with some other fuel? (IF YES...in what year did you change. What did you use to heat the water with before (Q.16)?

YEAR OF CHANGE.....(76-77)..___ ___

NO CHANGE	96	GO TO
D.K	97	Q.17
REF	98	
N.A	99	
NOT APPRO	00	

Q.16b ENTER CODE FOR PRIOR HEAT

OIL.....(78)....	1
PROPANE	2
ELECTRICITY	3
OTHER (SPECIFY)_____	4
D.K	7
REF	8
N.A	9
NOT APPROPRIATE	0

Q.17 Have you added any energy saving devices on your faucets or showers to reduce the amount of water you use... IF YES...in what year did you do this?

YEAR ADDED.....(79-80) ___ ___

NO CHANGE	96
D.K	97
REF	98
N.A	99

CARD 2 (1-4) ___ ___ ___ ___

Q.18 In the last five years have you installed any vents ...other than those in your attic... to improve the flow of air in your home...IF YES...when were they installed?

YEAR INSTALLED.....(5-6)...___ ___

NO CHANGE.....96

D.K.....97

REF.....98

N.A.....99

Q.19 Have you changed the temperature setting on your hot water heater in the last two years IF YES... did you raise or lower the temperature?

RAISED TEMP.....(7)...1

LOWERED TEMP.....2

NO CHANGE.....3 GO TO

D.K.....7 Q. 20

REF.....8

N.A.....9

Q.19A What, in particular, made you change the setting on your hot water heater?

_____

_____(8-9)..___ ___

D.K.....97

REF.....98

N.A.....99

NOT APPRO.....00

Q.20 Thinking about the future...that is the next two years...do you plan to .....

		YES	NO	D.K. UNSURE	REF.	N.A.
a. add any insulation to your home	(10)	1	2	7	8	9
b. replace any doors or windows	(11)	1	2	7	8	9
c. do any weather-stripping or caulking in your home	(12)	1	2	7	8	9
d. make any changes in the way your water is heated	(13)	1	2	7	8	9

Q.21 Based on your experience, is (READ EACH ITEM AND REPEAT FOR EACH ITEM) very effective...somewhat effective...or not very effective in reducing heat losses in a home?

		VERY EFFECT.	SOMEWHAT EFFECT.	NOT EFFECT.	DK	REF	N.A.
a. insulation	(14)	1	2	3	7	8	9
b. caulking and weather-stripping	(15)	1	2	3	7	8	9
c. replacing doors and windows	(16)	1	2	3	7	8	9
d. doing work on the exterior of a house	(17)	1	2	3	7	8	9

Q.22 What do you think is the most effective means of reducing heat loss in a home....(READ EACH ITEM FROM Q.21) or something else (what is that?)

insulation.....(18)....1

caulking or weatherstripping.....2

replacing doors or windows.....3

doing exterior work.....4

SOMETHING ELSE _____.5

D.K.....7

REF.....8

N.A.....9

Now, we want to ask about the heating system in your home....

Q.23 First of all...what is the <u>main</u> fuel used to heat your home....oil...electricity...propane...wood... or something else?

OIL.....(19)...1

ELECTRICITY.....2

PROPANE.....3

WOOD.....4

OTHER(_____).....5

D.K.....7

REF.....8

N.A.....9

Q.24 Do you use any other fuels to heat your home in addition to (READ RESPONSE FROM Q.23)..IF YES...what is that?

OIL.....(20)...1

ELECTRICITY.....2

PROPANE.....3

WOOD.....4

OTHER(_____).....5

ONLY ONE USED.....6

D.K.....7

REF.....8

N.A.....9

Q.25 Have you made any changes to your home heating system in the past fifteen years....IF YES...what changes have you made....RECORD EXACT AND DETAILED RESPONSES

_____

_____ (21-22)___ ___ ASK 25A

NO CHANGES.....96 GO TO

D.K.....97 Q.26

REF.....98

N.A.....99

Q.25A In what year did you make that/those change(s)

ENTER YEAR.....(23-24) ____ ___

D.K.....97

REF.....98

N.A.....99

NOT APPROPRIATE.....00

Q.25B As a result of the changes in your heating system, have you reduced the amount of money you spend on heating your home?

YES.....(25)....1

NO.....2

D.K.....7

REF.....8

N.A.....9

NOT APPROPRIATE.....0

Q.26 Do you have any plans to change your home heating system within the next two years..IF YES...what changes do you plan to make? Why would you plan to do that?

_____

_____ (26-27)___ ___

NO CHANGES.....96 GO TO

D.K.....97 Q.27

REF.....98

N.A.....99

Q.26A WHY CHANGES _____

_____(28-29) ____ ___

NO CHANGES.....96

D.K.....97

REF.....98

N.A.....99

NOT APPROPRIATE.....00

ASK ONLY IF IF SECONDARY HEAT SOURCE USED IN Q. 24 ELSE ASK Q.28

Q.27 In what year did you begin to use (READ SECONDARY SOURCE...RESPONSE TO Q. 24) as a backup heating system?

ENTER YEAR.....(30-31) ____ ___

D.K.....97

REF.....98

N.A.....99

NOT APPROPRIATE.....00

Q.28 Have you ever had your heating system tested to see if it is running efficiently. IF YES: When did you have that done?

ENTER YEAR.....(32-33) ____ ___

NOT TESTED.....96

D.K.....97

REF.....98

N.A.....99

Q.29 Are you very likely...somewhat likely or not very likely to have your heating system cleaned and checked annually?

VERY LIKELY.....(34).....1

SOMEWHAT LIKELY.....2

NOT VERY LIKELY.....3

D.K.....7

REF.....8

N.A.....9

Now, we'd like to turn to a few questions about electricity....

Q. 30 Are you on a budget plan with NB Power, that is, where you pay the same amount of money per month, summer and winter?

YES.....(35)....1

NO.....2 | GO TO

D.K.....7 | Q.30B

REF.....8

N.A.....9

IF ON MONTHLY BUDGET PLAN ASK:

Q.30A On average, what are your monthly bills from NB Power?

ENTER AMOUNT.....(36-38)..___ ___ ___ | GO TO

D.K.....997 | Q. 31

REF.....998

N.A.....999

Q.30B In a typical winter month, what is the average amount of your bill from NB Power?

ENTER AMOUNT.....(39-41).___ ___ ___

D.K.....997

REF.....998

N.A.....999

NOT APPRO.....000

Q.31 On average, how many months per year would you be paying about (READ AMOUNT FROM Q.30B) ENTER NUMBER (42-43)___ ___

D.K.....97

REF.....98

N.A.....99

NOT APPRO.....00

Q.32 In a typical summer month, what is the average amount of your bill from NB Power?

ENTER AMOUNT.....(44-46)___ ___ ___

D.K.....997

REF.....998

N.A.....999

NOT APPRO.....000

ASK ONLY IF R. USES SOMETHING OTHER THAN ELECTRICITY TO HEAT THEIR HOMES ELSE GO TO Q. 34

Now, we want to ask a few questions about the cost of heating your home?

Q.33 In a typical winter, how much would you pay to heat your home.. how much would you spend on all fuels (other than electricity)

ENTER AMT.....(47-50)..... ___ ___ ___ ___

D.K.....9997

REF.....9998

N.A.....9999

ELECTRICITY ONLY.....0000

Q.34 Thinking about the total cost of heating your home...do you think that the cost of heating your home is....

very expensive.....(51)...1

somewhat expensive.....2

not very expensive.....3

D.K.....7

REF.....8

N.A.....9

Now, we want to turn to a few questions about some energy programs...

Q.35 Would you say that you are very familiar, somewhat familiar or not very familiar with (READ EACH MENTION)... (OMIT FOR LAST ITEM) or is this the first time you've ever heard of this?

		VERY FAM.	SOME FAM.	NOT FAM.	FIRST	D.K.	REF.	N.A.
A. the R 2000 program	(52)	1	2	3	4	7	8	9
B. NB Power home energy loans	(53)	1	2	3	4	7	8	9
C. CHIP program	(54)	1	2	3	4	7	8	9
D. any other programs to make your home more energy efficient (IF YES: What is that?) _____	(55)	1	2	3	4	7	8	9

Q.36 Have you received any grant, loan or information from an energy program to help you make your home more energy efficient? IF YES What program was that?

Q. 36a NAME OF GRANT/PROGRAM_____

_____(56-57) ___ ___

NO ASSISTANCE RECEIVED	94	GO TO
INFORMATION ONLY	95	
D.K.	97	Q. 37
REF	98	
N.A.	99	

Q.36b What work did you have done to your home through this program? (PROBE FOR DETAILS)

_____

_____(58-59) ___ ___

D.K.	97
REF	98
N.A.	99
NOT APPRO	00

Q.36c Altogether, about how much money did you receive through this program?

ENTER AMOUNT $_____(60-63)___ ___ ___ ___

D.K.....9997

REF.....9998

N.A.....9999

NOT APPRO.....0000

Q.37 If the government wanted to get people to do more to conserve energy, what do you think would be the best way to do this...to provide a grant or loan, to increase the cost of fuel, to give advice on how to save money on heating costs, to provide energy education programs through the school system...or something else...what could the government do to get people to conserve energy?

_____

_____(64-65)___ ___

D.K.....97

REF.....98

N.A.....99

Q.38 As we said...NB Power makes loans available to make homes more energy efficient. Do you think that you would be very likely, somewhat likely or not very likely to apply for one of these loans over the next two years?

VERY LIKELY.....(66)..1 | GO TO

SOMEWHAT LIKELY.....2 | Q.38B

D.K.....7 | GO TO

REF.....8 | Q.38A

N.A.....9

NOT VERY LIKELY.....3→

Q38a Is there any particular reason why you would not be likely to apply for one of these loans?

_____

_____(67-68) ___ ___

NO...NO NEED NOT INTERESTED.....97

REF.....98 GO TO

N.A.....99 Q.39

NOT APPRO.....00

Q.38b What type of work would you have done on your home with one of these loans?

_____

_____(69-70) ___ ___

D.K.....97

REF.....98

N.A.....99

NOT APPRO.....00

Q.39 We'd like to have you rate your home....is your home

as energy efficient as possible.....(71)...1 GO TO Q.40

not totally energy efficient, but better than it use to be.....2

not really very energy efficient.....3

OTHER_____.....4

D.K.....7

REF.....8

N.A.....9

Q.39A Is there anything in particular that you would like to do to increase the energy efficiency of your home but have not been able to? (IF YES: What would you like to be able to do?)

ENTER WANTS _____

_____(72-73)___ ___

NO ACTIVITY.....95

D.K.....97

REF.....98

NA.....99

NOT APPRO.....00

Q. 39B Why haven't you been able to do this?

_____

_____(74-75)..___ ___

D.K.....97

REF.....98

NA.....99

NOT APPRO.....00

Q.40 If you wanted to get information on improving the energy efficiency of your home where do you think you could get the best information on how or what to do.....

from building contractors.....(76-77)..11

from NB Power.....13

from conservation groups.....14

from local fuel dealers.....15

from the federal government.....16

from the provincial government.....17

or from someplace else....(where is that?

_____.....18

D.K.....97

REF.....98

N.A.....99

CARD 3 (1-4) ___ ___ ___ ___

Q.41 Have you ever received any information about energy use in your home?

YES.....(5)....1		
NO.....2	GO TO	
D.K.....7	Q. 42	
REF.....8		
N.A.....9		

Q.44 In general, do you think that it is very important, somewhat important, or not very important that the federal government be involved in programs that try to get people to conserve energy?

VERY IMPORTANT.....(12)....1

SOMEWHAT IMPORTANT.....2

NOT VERY IMPORTANT.....3

D.K.....7

REF.....8

N.A.....9

Q.45 How about the provincial government...is it very important, somewhat important, or not very important that they be involved in programs that try to get people to conserve energy?

VERY IMPORTANT.....(13)...1

SOMEWHAT IMPORTANT.....2

NOT VERY IMPORTANT.....3

D.K.....7

REF.....8

N.A.....9

Before we end this study, we need to ask just a few more questions about you and your home...

Q.46 Is your home located in the central part of a city or town, in a suburban area, or in a rural area?

CENTRAL.....(14)..1

SUBURBAN.....2

RURAL.....3

D.K.....7

REF.....8

N.A.....9

Q.41a What type of information did you receive? (PROBE FOR DETAIL)

_____

_____(6-7) ___ ___

D.K.....97

REF.....98

N.A.....99

NOT APPROPRIATE.....00

Q.42 Is there any particular type of information on increasing the energy efficiency of your home that you would like to receive. IF YES..what is that?

TYPE OF INFO NEEDED_____

_____(8-9)___ ___

HAVE ENOUGH INFORMATION.....95

D.K.....97

REF.....98

N.A.....99

Q.43 If we wanted to try to get information to you about reducing the amount of energy used in your home...what would be the best way to do it....through radio or television...in the newspaper....through written material....through a toll free number or with your power bill ...what would be the best way to make information available to you about reducing the amount of energy used in your home....(RECORD EXACT RESPONSE)

_____

_____..(10-11) ___ ___

HAVE ENOUGH INFORMATION.....95

D.K.....97

REF.....98

N.A.....99

Q.47 Does your home have a basement or cellar?
IF YES ...is that a full or half basement?

FULL.....(15)...1

HALF.....2

CEMENT SLAB.....3

NO BASEMENT.....4

D.K.....7

REF.....8

N.A.....9

Q.48 Altogether, how many floors of <u>living</u> space are in your home...one, two three or more?

ONE.....(16)....1

TWO.....2

THREE OR MORE.....3

D.K.....7

REF.....8

N.A.....9

Q.49 How many years have you lived in your present home?

ENTER YEARS.....(17-18)..___ ___

D.K.....97

REF.....98

NA.....99

Q.49 If you were to sell your home today, what price would you expect to receive for it? (ENTER AMOUNT IN SPACE TO LEFT OF COLUMN NUMBERS)

_____(19-22) .___ ___ ___ ___

D.K.....9997

REF.....9998

N.A.....9999

NOT APPRO.....0000

Turning to a few questions about you....

Q.50 What is your mother tongue - the language you first learned to speak?

ENGLISH.....(23).....1

FRENCH.....2

OTHER_____.....3

REF.....8

N.A.....9

Q.51 What is the language spoken most often in your home?

ENGLISH.....(24).....1

FRENCH.....2

OTHER_____.....3

REF.....8

N.A.....9

Q.52 In what year were you born?

ENTER YEAR.....(25-26) ___ ___

REF.....98

N.A.....99

Q.53 What was the highest level of school you attended... grammar/elementary, high school, community college, nursing or vocational school, university or graduate school?

ELEMENTARY/GRAMMAR.....(27-28)..11
HIGH SCHOOL (did you graduate?)
NO.....12
YES.....13
VOCATIONAL, COMMUNITY COLLEGE, OTHER NON-UNIVERSITY.....14
UNIVERSITY:
did you receive a degree? NO.....15
YES.....16
GRADUATE SCHOOL
did you receive a degree? NO.....17
YES.....18

DK.....97

REF/NA.....99

Q.54 Are you/is the female head of your household currently employed, unemployed, disabled, retired, a student, a housewife or what?

EMPLOYED: Is that...self employed .....(29-30)..11
employed full-time.....12
employed part-time.....13
UNEMPLOYED.....14
RETIRED.....21
DISABLED.....22
STUDENT.....23
HOUSEWIFE.....24
REFUSED.....98
N.A.....99
NO FEMALE IN HOME.....00

Q.55 Are you/is the male head of your household currently employed, unemployed, disabled, retired, a student, or what?

EMPLOYED: Is that...self employed .....(31-32)..11

employed full-time.....12

employed part-time.....13

UNEMPLOYED.....14

RETIRED.....21

DISABLED.....22

STUDENT.....23

REFUSED.....98

N.A.....99

NO MALE IN HOME.....00

Q.56 Thinking of your total income for your household in 1987--that is income from all sources before taxes --was your total household income in 1987 more than $15,000?

YES.....(33-34).GO TO C

NO.....11 GO TO B

B. Was your total household income before taxes in 1987 more than $10,000?
YES.....10 STOP

NO.....09 STOP

C. Was your total household income in 1987 more than $20,000?
YES.....GO TO D

NO .....13 STOP

D. Was your total household income in 1987 more than $25,000?
YES.....GO TO E

NO.....15 STOP

E. Was your total household income in 1987 more than $30,000?
YES.....18 STOP

NO.....17 STOP

DON'T KNOW.....97

REFUSED.....98

N.A.....99

That's all the questions that we have for you today/night. Thanks for helping us with this survey.

Q.57 ENTER RESPONDENT'S SEX

FEMALE.....(35)...1

MALE.....2

Q.58 ENTER APPROXIMATE LENGTH OF INTERVIEW.....(36-37).....___ ___

CHECK FOR COMPLETION.....THANKS.

BASELINE MARKET RESEARCH LTD. (506)458-8137 LIVRE _____
ANALYSE DU MARCHE: CONSERVATION DE L'ENERGIE
BMR 198802 - JANVIER 1988 NO. DU PARTICIPANT __ __ __ __

TELEPHONE	INTERVIEWEUR	DATE DE L'APPEL	HEURE DE L'APPEL	NO. APPELE	REMARQUES

Bonjour, mon nom est _____ de Baseline Market Research Ltd. à Fredericton. Nous effectuons une étude au sujet du chauffage domestique au Nouveau-Brunswick et nous apprécierions votre collaboration. Puisque cette étude doit inclure certains modèles de maison je dois d'abord vous demander...

A.1 Est-ce que vous êtes propriétaire de la maison dans laquelle vous habitez ou est-ce qu'elle appartient à un autre membre de la famille?

OUI.. PARTICIPANT/CONJOINT OU AUTRE MEMBRE DE LA FAMILLE APPARTIENT LA MAISON
NON.. UN LOGIS LOUE...REMERCIER ET TERMINER

A.2 Dans quel modèle de maison habitez-vous?

1. maison unifamiliale
2. duplex ou maison avec deux familles
3. maison modulaire
4. maison mobile ou mini-maison
5. immeuble résidentiel...c'est-à-dire un édifice ayant plus que deux appartements
6. maison en rangée
7. autre modèle de maison..qu'est-ce que c'est _____

A.3 Environ en quelle année votre maison a-t-elle été construite? 19_____.

VERIFICATION D'ELIGIBILITE: LA MAISON EST ELIGIBLE SI ELLE EST UNIFAMILIALE, UN DUPLEX OU UNE MAISON MODULAIRE CONSTRUITE AVANT OU PENDANT L'ANNEE 1986 ET HABITEE PAR LE PROPRIETAIRE...SI ELIGIBLE, CONTINUER...SI NON-ELIGIBLE, REMERCIER ET TERMINER.

Selon la méthode de recherche utilisée, je dois maintenant parler à la personne qui connaît le mieux les combustibles à chauffage qui sont utilisés et l'efficacité énergétique globale de votre maison...est-ce que c'est vous-même?

OUI...CONTINUER
NON...DEMANDER SI CETTE PERSONNE EST DISPONIBLE...SI NON, OBTENIR UN TEMPS POUR RAPPELER...SI OUI, EXPLIQUER LE PROJET ET CONTINUER...INSCRIRE LES COMMENTAIRES NECESSAIRES DANS L'ESPACE CI-HAUT (I.E. REFUSE OU NON DISPONIBLE).

Cette etude nous aidera à comprendre l'attitude des gens du Nouveau-Brunswick face à certaines questions relatives à l'énergie. Nous vous demanderons également certaines questions relatives au chauffage domestique et à l'intempérisation. Votre ménage est un parmi un nombre limité de ménages choisis à travers la province. Nous apprécierions grandement votre collaboration. Nous espérons que vous prendrez le temps de penser à chaque question et de répondre le plus honnêtement possible. Toutes vous réponses sont confidentielles...si vous ne voulez pas répondre à une question particulière, vous n'avez qu'à me le dire et je passerai à la question suivante. Nous voulons débuter avec quelques questions d'ordre générale...

NO. DU PARTICIPANT (1-4) ___ ___ ___ ___

PREFIE DU CENTRAL (5-7) ___ ___ ___

LANGUE DE L'ENTREVUE (8)
ANGLAIS.....1
FRANCAIS.....2

TYPE D'HABITATION
INSCRIRE LE CODE (9)....___

ANNEE DE CONSTRUCTION (10-11)__ ___

Q.1. Nous aimerions savoir l'importance ou le peu d'importance de certaines questions par rapport à l'avenir du Nouveau-Brunswick. Selon votre expérience...(REPETER LE POINT) pensez-vous que (LIRE CHAQUE PROBLEME) sera une question très importante...assez importante...ou pas très importante pour les Néo-brunswickois (LAISSER TOMBER A CHAQUE DEUX POINTS) au cours des cinq prochaines années?

			TRES IMP.	ASSEZ IMP.	PAS IMP.	N.S.P.	REF.	N.A.
a.	le taux de chômage	(12)	1	2	3	7	8	9
b.	la pollution de l'eau	(13)	1	2	3	7	8	9
c.	les besoins énergétiques futurs	(14)	1	2	3	7	8	9
d.	les occasions d'emploi pour les jeunes	(15)	1	2	3	7	8	9
e.	la pollution de l'air	(16)	1	2	3	7	8	9
f.	l'avenir de l'industrie forestière	(17)	1	2	3	7	8	9

Q.2 Parmi ces questions,(REPETER CHACUNE) laquelle, selon vous, sera la plus importante pour les gens du Nouveau-Brunswick au cours des cinq prochaines années?

_____(18-19)___ ___

AUCUNE DE CES QUESTIONS.....95

N.S.P./PAS D'OPINION.....97

REF.....98

N.A.....99

Q.3 Est-ce qu'il y a d'autres questions relatives à l'énergie et aux ressources naturelles qui, selon vous, deviendrons très importantes pour les gens du Nouveau-Brunswick au cours de cinq prochaines années...(SI OUI.. Lesquelles?)

_____(20-21)___ ___

PAS D'AUTRE QUESTION.....95

N.S.P./PAS D'OPINION.....97

REF.....98

NA.....99

Q.4 Maintenant, nous aimerions connaître vos réactions au sujet de certains coûts relatifs au fonctionnement d'une maison de nos jours...pensez-vous que (LIRE CHAQUE OBJET) sont...POUR LE DEUXIEME ET LES AUTRES OBJETS UTILISER: sont (OBJET) très dispendieux...assez dispendieux...pas très dispendieux...pas dispendieux du tout.

		TRES DISP	ASSEZ DISP	PAS TRES DISP	PAS DU TOUT DISP	NSP	REF/ N.A.	NON APPR.
a. les coûts pour nourrir vous et la famille	(22)	1	2	3	4	7	9	0
b. les coûts de votre hypothèque	(23)	1	2	3	4	7	9	0
c. les coûts de l'électricité pour votre maison excluant le chauffage	(24)	1	2	3	4	7	9	0
d. les coûts pour le chauffage de votre maison	(25)	1	2	3	4	7	9	0
e. les coûts des impôts fonciers sur votre maison	(26)	1	2	3	4	7	9	0
f. les coûts de l'essence pour votre voiture	(27)	1	2	3	4	7	9	0

Q.5 En pensant à tous ces coûts, lequel est celui qui vous préoccupe le plus dans votre vie quotidienne ...les coûts de la nourriture...l'hypothèque..le chauffage ...les coûts de l'électricité...les impôts fonciers sur votre propriété ou les coûts de l'essence pour votre voiture?

_____(28-29)___ ___

AUCUN DE CES COUTS.....95

N.S../PAS D'OPINION.....97

REF.....98

N.A.....99

Q.6 Selon votre expérience...diriez-vous que vous êtes très préoccupé...assez préoccupé...ou pas très préoccupé à réduire le montant d'énergie utilisé dans votre maison aujourd'hui?

TRES PREOCCUPE.....(30).....1

ASSEZ PREOCCUPE.....2

PAS TRES PREOCCUPE.....3

N.S.P./PAS D'OPINION.....7

REF.....8

N.A.....9

Q.7 Et vos amis...diriez-vous qu'ils sont très préoccupés... assez préoccupés...ou pas très préoccupés à réduire le montant d'énergie utilisé dans leurs maisons aujourd'hui?

TRES PREOCCUPES.....(30).....1

ASSEZ PREOCCUPES.....2

PAS TRES PREOCCUPES.....3

N.S.P./PAS D'OPINION.....7

REF.....8

N.A.....9

Q.8 Comparativement à il y a cinq ans, pensez-vous que vous êtes plus préoccupé par les questions énergétiques aujourd'hui...moins préoccupé par les questions énergétiques... ou vos préoccupations sont à peu près les mêmes aujourd'hui qu'elles étaient à ce moment-là?

PLUS PREOCCUPE.....(32).....1

MEME PREOCCUPATION.....2

MOINS PREOCCUPE.....3

N.S.P.ÑPAS D'OPINION.....7

REF.....8

N.A.....9

Maintenant nous aimerions vous demander quelques questions relatives à certaines choses que vous ayez peut-être fait pour hivériser de votre maison....

Q.9 Tout d'abord, est-ce que (LIRE CHAQUE OBJET) de votre maison est/sont isolé(s)...(VERIFIER SI OUI...RETOURNER A CHAQUE OBJET ET DEMANDER: En quelle année ces (OBJET) ont-ils été isolés?

	COCHER		INSCRIRE L'ANNEE	PAS FAIT	N.S.P.	REF.	N.A.
a. le grenier	___	(33-34)	19__ __	00	97	98	99
b. les murs	___	(35-36)	19__ __	00	97	98	99
c. le sous-sol	___	(37-38)	19__ __	00	97	98	99
d. les conduits d'eau	___	(39-40)	19__ __	00	97	98	99
e. les conduits de chaleur	___	(41-42)	19__ __	00	97	98	99
f. le chauffe-eau	___	(43-44)	19__ __	00	97	98	99

Q.10 Avez-vous acheté des contre-chassis ou contre-portes au cours des cinq dernières années?

FENETRES SEULEMENT..... (45)..1
PORTES ET FENETRES.....2 — ALLER A Q.10A

PORTES SEULEMENT.....3
NI L'UN NI L'AUTRE.....4
N.S.P.....7
REF.....8
N.A.....9
— ALLER A Q. 11

Q.10A Avez-vous remplacé la plupart, certaines ou seulement quelques fenêtres dans votre maison?

LA PLUPART/TOUTES.....(46)....1

CERTAINES.....2

QUELQUES-UNES.....3

N.S.P.....7

REF.....8

N.A.....9

NON APPRO.....0

Q.10B Est-ce que ces fenêtres ont été remplacées dans le cadre d'un projet de rénovation de votre maison...pour prévenir la perte de la chaleur... ou autre?

RENOVATION.....(47)....1

PREVENIR LA PERTE DE CHALEUR.....2

LES DEUX.....3

AUTRE(_____)...4

N.S.P.....7

REF.....8

N.A.....9

NON APPRO.....0

Q.11 Avez-vous fait du calfatage ou posé des coupe-bises dans votre maison au cours des cinq dernières années?

NON.....(48)..2

N.S.P.....7

REF.....8

N.A.....9

ALLER A Q.12

OUI.....1 ---→

Q.11A Avez-vous fait du calfatage ou posé des coupe-bises (LIRE CHAQUE OBJET ET COCHER SI APPROPRIE)..ALORS SI OUI... en quelle année avez-vous fait le calfatage ou la pose des coupe-bises (LIRE CHAQUE OBJET)

	COCHER	INSCRIRE L'ANNEE	PAS FAIT	N.S.P.	REF.	N.A.
a. autour des fenêtres	___(49-50)	19__ __	00	97	98	99
b. autour des portes	___(51-52)	19__ __	00	97	98	99
c. autour des plinthes et des planchers	___(53-54)	19__ __	00	97	98	99
d. le long de la partie supérieure de la fondation	___(55=56)	19__ __	00	97	98	99
e. autour des sorties d'électricité	___(57-58)	19__ __	00	97	98	99
f. autour des autres endroits dans votre maison SPECIFIER_____	___(59-60)	19__ __	00	97	98	99

Q.12 Au cours des cinq dernières années, est-ce qu'un entrepreneur ou autre entreprise aurait effectué le scellement des fuites d'air sur votre maison afin de réduire la perte de chaleur?

OUI.....(61).....1

NON.....2

N.S.P.....7

REF.....8

N.A.....9

ALLER A Q.13

Q.12A Diriez-vous que l'élimination des fuites d'air est une façon très efficace...assez efficace ou pas très efficace de prevenir la perte de chaleur?

TRES EFFICACE.....(62).....1

ASSEZ EFFICACE.....2

PAS TRES EFFICACE.....3

N.S.P.....7

REF.....8

N.A.....9

NON APPRO.....0

Q.13 Avez-vous effectué certains travaux à l'extérieur de votre maison pour réduire les courants d'air? SI OUI ...quels genres de travaux avez-vous effectué? En quelle année cela a-t-il été effectué?

_____

_____ (63-64)___ ___

AUCUN TRAVAIL EFFECTUE.....95

N.S.P.....97

REF.....98

N.A.....99

ANNEE SI TRAVAUX EFFECTUES.....(65-66)___ ___

N.S.P.....97

REF.....98

N.A.....99

NON APPRO.....00

Q.14 En moyenne, à quels degrés de température gardez-vous habituellement la maison

		DEGRES	N.S.P.	REF	N.A.
a. pendant la journée	(67-68)	___ ___	97	98	99
b. pendant la soirée	(69-70)	___ ___	97	98	99
c. pendant la nuit	(71-72)	___ ___	97	98	99

INTERVIEWEUR: SI Q.14A, 14B OU 14C NE SONT PAS LES MEMES, ENCERCLER LE '1' SI NON, ENCERCLER LE '2'

VARIETE DANS LA MAISON.....(73)...1

AUCUNE VARIETE.....2

Q.15 Est-ce que la température que vous maintenez dans votre maison est plus élevée, moins élevée ou environ la même qu'il y a cinq ans (SI LE PARTICIPANT HABITAIT AILLEURS, DEMANDER: de façon générale)

PLUS ELEVEE.....(74)...1

MOINS ELEVEE.....2

LA MEME.....3

N.S.P.....7

REF.....8

N.A.....9

Q.16 De quelle façon chauffez-vous l'eau pour votre maison...avec du pétrole...du gaz propane...de l'electricité ou autre?

PETROLE.....(75)....1

GAZ PROPANE.....2

ELECTRICITE.....3

AUTRE (SPECIFIER)_____.4

PAS D'EAU CHAUDE.....5

N.S.P.....7

REF.....8

N.A.....9

ALLER A Q.17

Q.16a Avez-vous déjà chauffé votre eau en utilisant d'autres carburants? (SI OUI...en quelle année avez-vous effectué le changement. Qu'est-ce que vous utilisiez auparavant pour chauffer l'eau (Q.16)?

ANNEE DU CHANGEMENT.....(76-77).. ___ ___

PAS DE CHANGEMENT	96	ALLER A Q.17
N.S.P	97	
REF	98	
N.A	99	
NON APPRO	00	

Q.16b INSCRIRE LE CODE DU MODE DE CHAUFFAGE PRECEDENT

PETROLE.....(78)....1

GAZ PROPANE.....2

ELECTRICITE.....3

AUTRE (SPECIFIER)_____.4

N.S.P.....7

REF.....8

N.A.....9

NON APPRO.....0

Q.17 Avez-vous ajouté des dispositifs pour épargner l'énergie sur vos robinets ou vos douches pour réduire le volume d'eau que vous utilisez...SI OUI...en quelle année?

ANNEE.....(79-80) ___ ___

PAS DE CHANGEMENT.....96

N.S.P.....97

REF.....98

N.A.....99

CARTE 2 (1-4) ___ ___ ___ ___

Q.18 Au cours des cinq dernières années, avez-vous installé des évents...autres que ceux dans le grenier... pour améliorer la circulation de l'air dans votre maison...
SI OUI...en quelle année ont-ils été installés?

ANNEE INSTALLES.....(5-6)...___ ___

PAS DE CHANGEMENT.....96

N.S.P.....97

REF.....98

N.A.....99

Q.19 Avez-vous changé le réglage de la température sur votre chauffe-eau au cours des deux dernières années?
SI OUI...Avez-vous augmenté ou diminué la température?

AUGMENTE LA TEMPERATURE.....(7).....1

DIMINUE LA TEMPERATURE.....2

PAS DE CHANGEMENT.....3 | ALLER A Q.20

N.S.P.....7

REF.....8

N.A.....9

Q.19A Qu'est-ce qui vous a fait changer le réglage de la température sur votre chauffe-eau?

_____

_____...(8-9)....___ ___

N.S.P.....97

REF.....98

N.A.....99

NON APPRO.....00

Q.20 En pensant à l'avenir...c'est-à-dire aux deux prochaines années...planifiez-vous de...

		OUI	NON	N.S.P. PAS SUR	REF.	N.A.
a. ajouter de l'isolant à votre maison	(10)	1	2	7	8	9
b. remplacer des portes ou fenêtres	(11)	1	2	7	8	9
c. faire le calfatage ou la pose de coupe-bises	(12)	1	2	7	8	9
d. effectuer des changements dans la façon de chauffer l'eau	(13)	1	2	7	8	9

Q.21 Selon votre expérience est-ce que (LIRE CHAQUE OBJET ET REPETER POUR CHACUN) très efficace...assez efficace... pas très efficace pour réduire les pertes de chaleur dans une maison?

		TRES EFF.	ASSEZ EFF.	PAS TRES EFF.	N.S.P.	REF.	N.A.
a. l'isolation	(14)	1	2	3	7	8	9
b. le calfatage et la pose de coupe-bises	(15)	1	2	3	7	8	9
c. le remplacement des portes et fenêtres	(16)	1	2	3	7	8	9
d. les travaux sur l'extérieur d'une maison	(17)	1	2	3	7	8	9

Q.22 Selon vous, quel est le moyen le plus efficace pour réduire la perte de chaleur dans une maison (LIRE CHAQUE OBJET DE LA Q.21) ou un autre moyen (lequel?)

isolation.....(18)....1

calfatage et pose de coupe-bises.....2

remplacer les portes et fenêtres.....3

faire des travaux à l'extérieur.....4

AUTRE MOYEN _____.5

N.S.P.....7

REF.....8

N.A.....9

Maintenant nous aimerions vous parler du système de chauffage dans votre maison....

Q.23 Tout d'abord, quel est le carburant principal utilisé pour chauffer votre maison...le pétrole...l'électricité ...le gaz propane...le bois...ou autre?

PETROLE.....(19)...1

ELECTRICITE.....2

PROPANE.....3

BOIS.....4

AUTRE(_____).....5

N.S.P.....7

REF.....8

N.A.....9

Q.24 En plus (LIRE REPONSE Q.23), utilisez-vous d'autres carburants pour chauffer votre maison...SI OUI...lequel?

PETROLE.....(20)...1

ELECTRICITE.....2

PROPANE.....3

BOIS.....4

AUTRE(_____).....5

UTILISE SEULEMENT UN.....6

N.S.P.....7

REF.....8

N.A.....9

Q.25 Avez-vous effectué des changements à votre système de chauffage domestique au cours des quinze dernières années...SI OUI...quels changements avez-vous effectué... INSCRIRE LES REPONSES EXACTES ET DETAILLEES

_____

_____ (21-22)___ ___DEMANDER 25A ALLER A Q.26

PAS DE CHANGEMENT.....96

N.S.P.....97

REF.....98

N.A.....99

Q.25A En quelle année avez-vous effectué ces changements?

INSCRIRE L'ANNEE.....(23-24) ____ ___

N.S.P.....97

REF.....98

N.A.....99

NON APPRO.....00

Q.25B Est-ce que ces changements ont eu comme résultat de réduire le montant d'argent que vous dépensez pour chauffer votre maison?

OUI.....(25)....1

NON.....2

N.S.P.....7

REF.....8

N.A.....9

NON APPRO.....0

Q.26 Est-ce que vous planifiez de changer votre système de chauffage domestique au cours des deux prochaines années ...SI OUI...Quels changements planifiez-vous d'effectuer? Pourquoi planifiez-vous cela?

_____

_____ (26-27)___ ___

PAS DE CHANGEMENT.....96 | ALLER A Q.27

N.S.P.....97

REF.....98

N.A.....99

Q.26A POURQUOI CES CHANGEMENTS_____

_____(28-29) ____ ___

PAS DE CHANGEMENT.....96

N.S.P.....97

REF.....98

N.A.....99

NON APPRO.....00

DEMANDER SEULEMENT SI UNE SOURCE SECONDAIRE DE CHALEUR EST UTILISEE A LA Q.24 - SI NON - ALLER A Q.28

Q.27 En quelle année avez-vous commencé à utiliser (LIRE SOURCE SECONDAIRE A Q.24) comme système de chauffage auxiliaire?

INSCRIRE L'ANNEE.....(30-31) ____ ___

N.S.P.....97

REF.....98

N.A.....99

NON APPRO.....00

Q.28 Avez-vous déjà fait vérifier votre système de chauffage pour savoir s'il fonctionne de façon efficace? SI OUI: Quand avez-vous fait faire cela?

INSCRIRE L'ANNEE.....(32-33) ____ ___

NON VERIFIE.....96

N.S.P.....97

REF.....98

N.A.....99

Q.29 Est-il très probable...assez probable ou pas très probable que vous ferez vérifier et nettoyer votre système de chauffage à tous les ans?

TRES PROBABLE.....(34).....1

ASSEZ PROBABLE.....2

PAS TRES PROBABLE.....3

N.S.P.....7

REF.....8

N.A.....9

Maintenant nous aimerions vous demander quelques questions au sujet de l'électricité....

Q.30 Etes-vous sur un plan budgétaire avec Energie Nouveau-Brunswick, c'est-à-dire, le plan où vous payez le même montant d'argent chaque mois, l'été comme l'hiver?

OUI.....(35)....1

NON.....2 | ALLER A Q.30B

N.S.P.....7

REF.....8

N.A.....9

SI SUR UN PLAN BUDGETAIRE MENSUEL, DEMANDER:

Q.30A En moyenne, combien est votre facture mensuelle d'Energie Nouveau-Brunswick?

INSCRIRE LE MONTANT.....(36-38)..___ ___ ___ | ALLER A Q.33

N.S.P.....997

REF.....998

N.A.....999

Q.30B Pour un mois habituel, quelle est la moyenne du montant de votre facture d'Energie NB?

INSCRIRE LE MONTANT.....(39-41).___ ___ ___

N.S.P.....997

REF.....998

N.A.....999

NON APPRO.....000

Q.31 En moyenne, combien de mois par année payez-vous environ (LIRE LE MONTANT A LA Q.30B) INSCRIRE LE NO. (42-43)___ ___

N.S.P.....97

REF.....98

N.A.....99

NON APPRO.....00

Q.32 Pendant un mois d'été habituel, quelle est la moyenne du montant de votre facture d'Énergie NB?

INSCRIRE LE MONTANT.....(44-46)___ ___ ___

N.S.P.....997

REF.....998

N.A.....999

NON APPRO.....000

DEMANDER SEULEMENT SI LE PARTICIPANT UTILISE UN CARBURANT AUTRE QUE L'ELECTRICITE POUR CHAUFFER SA MAISON, SI NON ALLER A Q.34.

Maintenant nous aimerions vous demander quelques questions au sujet des coûts du chauffage de votre maison.

Q.33 Pendant un hiver habituel, combien payez-vous pour chauffer votre maison...combien d'argent dépensez-vous pour tous les carburants (sauf l'électricité)

INSCRIRE LE MONTANT.....(47-50)..... ___ ___ ___ ___

N.S.P.....9997

REF.....9998

N.A.....9999

L'ELECTRICITE SEULEMENT.....0000

Q.34 En pensant au coût total du chauffage de votre maison ...pensez-vous que le coût du chauffage de votre maison est...

très élevé.....(51)...1

assez élevé.....2

pas très élevé.....3

N.S.P.....7

REF.....8

N.A.....9

Maintenant nous aimerions vous demander quelques questions au sujet de certains programmes énergétiques...

Q.35 Diriez-vous que vous connaissez très bien, assez bien ou pas très bien (LIRE CHAQUE PROGRAMME) ou est-ce que c'est la première fois que vous entendez parler de ces programmes?

		TRES BIEN	ASSEZ BIEN	PAS TRES BIEN	PREMIERE FOIS	NSP	REF	NA
A. le programme R2000	(52)	1	2	3	4	7	8	9
B. le programme de prêts pour les économies d'énergie domestique d'Energie NB	(53)	1	2	3	4	7	8	9
C. Programme ITRC (CHIP)	(54)	1	2	3	4	7	8	9
D. tout autre programme pour augmenter le rendement énergétique de votre maison (SI OUI: Lequel?) _____	(55)	1	2	3	4	7	8	9

Q.36 Avez-vous reçu des subventions, des prêts ou des renseignements au sujet d'un programme énergétique pour vous aider à faire de votre maison une maison à haut rendement énergétique? SI OUI: Quel programme?

Q. 36a NOM DE LA SUBVENTION OU DU PROGRAMME_____

_____(56-57) ___ ___

N'A PAS RECU D'AIDE	94	ALLER A
RENSEIGNEMENTS SEULEMENT	95	
N.S.P	97	Q. 37
REF	98	
N.A	99	

Q.36b Quels changements avez-vous effectué à votre maison à l'aide de ce programme? (OBTENIR LES DETAILS)

_____

_____(58-59) ___ ___

N.S.P.....97

REF.....98

N.A.....99

NON APPRO.....00

Q.36c Au total, combien d'argent avez-vous reçu de ce programme?

INSCRIRE LE MONTANT $_____(60-63)___ ___ ___ ___

N.S.P.....9997

REF.....9998

N.A.....9999

NON APPRO.....0000

Q.37 Si le gouvernement voulait que les gens en fassent d'avantage pour conserver l'énergie, quelle serait la meilleure façon de le faire...fournir une subvention ou un prêt, augmenter le coût du carburant, donner des conseils sur des méthodes pour épargner sur le coût du chauffage, fournir des programmes d'éducation sur l'énergie au niveau du système scolaire...ou autre chose..qu'est-ce que le gouvernement pourrait faire pour amener les gens à conserver l'énergie?

_____

_____(64-65)___ ___

N.S.P.....97

REF.....98

N.A.....99

Q.38 Comme nous l'avons indiqué...Energie N-B offre des prêts pour améliorer le rendement énergétique des maisons. Pensez-vous qu'il est très probable, assez probable ou pas très probable que vous ferez une demande pour un de ces prêts au cours des deux prochaines années?

TRES PROBABLE.....(66)..1	ALLER A Q.38B	
ASSEZ PROBABLE.....2		
N.S.P.....7	ALLER A Q.38A	
REF.....8		
N.A.....9		
PAS TRES PROBABLE.....3		

Q.38a Est-ce qu'il y a une raison particulière pour laquelle il est peu probable que vous ferez une demande pour un de ces prêts?

_____

_____(67-68) ___ ___

NON..PAS DE BESOIN..PAS INTERESSE.....97	
REF.....98	ALLER A Q.39
N.A.....99	
NON APPRO.....00	

Q.38b Quels genres de travaux effectueriez-vous sur votre maison si vous aviez un de ces prêts?

_____

_____(69-70) ___ ___

N.S.P.....97
REF.....98
N.A.....99
NON APPRO.....00

Q.39 Pouriez-vous évaluer votre maison...votre maison...

a le meilleur rendement énergétique possible.....(71)...1 ALLER A Q.40

n'est pas entièrement au plus haut rendement énergétique possible mais mieux qu'auparavant.....2

n'a pas vraiment un haut rendement énergétique.....3

AUTRE_____.....4

N.S.P.....7

REF.....8

N.A.....9

Q.39A Est-ce qu'il y a une chose en particulier que vous aimeriez faire pour augmenter l'efficacité énergétique de votre maison mais que vous n'avez pu faire jusqu'à maintenant? (SI OUI: Qu'est-ce que vous aimeriez faire?)

INSCRIRE LES CHOSES_____

_____(72-73)___ ___

AUCUNE CHOSE EN PARTICULIER.....95

N.S.P.....97

REF.....98

NA.....99

NON APPRO.....00

Q. 39B Pourquoi n'avez-vous pu effectuer cela?

_____

_____(74-75)..___ ___

N.S.P.....97

REF.....98

NA.....99

NON APPRO.....00

Q.40 Si vous vouliez avoir des renseignements sur les moyens d'améliorer l'efficacité énergétique de votre maison, quel serait, selon vous, le meilleur endroit pour vous procurer les renseignements sur quoi faire ou comment le faire...

les entrepreneurs en construction.....(76-77)..11

Energie NB.....13

les groupes de conservation.....14

les vendeurs de carburant locaux.....15

le gouvernement fédéral.....16

le gouvernement provincial.....17

ou ailleurs...(à quel endroit?)

_____.....18

N.S.P.....97

REF.....98

N.A.....99

CARTE 3 (1-4) ___ ___ ___ ___

Q.41 Avez-vous déjà reçu des renseignements au sujet de l'utilisation de l'énergie dans votre maison?

OUI.....(5)....	1	
NON.....	2	ALLER A Q. 42
N.S.P.....	7	
REF.....	8	
N.A.....	9	

Q.41a Quels genres de renseignements avez-vous reçus? (OBTENIR LES DETAILS)

_____

_____(6-7) ___ ___

N.S.P.....97

REF.....98

N.A.....99

NON APPRO.....00

Q.42 Est-ce qu'il y a un genre particulier de renseignements que vous aimeriez recevoir sur l'augmentation de l'efficacité énergétique de votre maison? SI OUI: Lequel?

Genre de renseignements requis_____

_____(8-9)___ ___

J'ai suffisamment de renseignements.....95

N.S.P.....97

REF.....98

N.A.....99

Q.43 Si nous voulions essayer de vous donner des renseignements au sujet de la réduction de l'énergie utilisée dans votre maison ...quel serait le meilleur moyen de le faire...la radio ou la télévision...les journaux...la documentation écrite...un service téléphonique sans frais ou avec la facture d'électricité...quel serait le meilleur moyen de vous offrir les renseignements au sujet de la réduction de l'énergie utilisé dans votre maison...(INSCRIRE LA REPONSE EXACTE)

_____

_____..(10-11) ___ ___

J'AI SUFFISAMMENT DE RENSEIGNEMENTS.....95

N.S.P.....97

REF.....98

N.A.....99

Q.44 De façon générale, pensez-vous qu'il est très important, assez important, ou pas très important que le gouvernement fédéral soit impliqué dans des programmes visant à amener les gens à conserver l'énergie?

TRES IMPORTANT.....(12)....1

ASSEZ IMPORTANT.....2

PAS TRES IMPORTANT.....3

N.S.P.....7

REF.....8

N.A.....9

Q.45 Qu'est-ce qu'il en est du gouvernement provincial... est-ce qu'il est très important, assez important, ou pas très important qu'il soit impliqué dans des programmes visant à amener les gens à conserver l'énergie?

TRES IMPORTANT.....(13)...1

ASSEZ IMPORTANT.....2

PAS TRES IMPORTANT.....3

N.S.P.....7

REF.....8

N.A.....9

Avant de terminer notre étude, nous devons vous demander quelques questions additionnelles au sujet de vous-même et de votre maison...

Q.46 Est-ce que votre maison est située dans la partie centrale d'une cité ou d'une ville, dans un banlieue ou une région rurale?

CENTRE-VILLE.....(14)..1

BANLIEUE.....2

RURALE.....3

N.S.P.....7

REF.....8

N.A.....9

Q.47 Est-ce que votre maison a un sous-sol ou une cave?
SI OUI ...est-ce un sous-sol complet ou un demi sous-sol?

COMPLET.....(15)...1

DEMI.....2

DALLE DE BETON.....3

PAS DE SOUS-SOL.....4

N.S.P.....7

REF.....8

N.A.....9

Q.48 Au total, combien d'étages d'espace habitable votre maison a-t-elle...un, deux, trois ou plus?

UN.....(16)....1

DEUX.....2

TROIS OU PLUS.....3

N.S.P.....7

REF.....8

N.A.....9

Q.49 Depuis combien d'années habitez-vous dans votre maison actuelle?

INSCRIRE LE NOMBRE D'ANNEES...(17-18)..___ ___

N.S.P.....97

REF.....98

NA.....99

Q.49 Si vous vendiez votre maison aujourd'hui, quel prix penseriez-vous obtenir? (INSCRIRE LE MONTANT DANS L'ESPACE A GAUCHE DE LA COLONNE DE CHIFFRES)

_____(19-22) .___ ___ ___ ___

N.S.P.....9997

REF.....9998

N.A.....9999

NON APPRO.....0000

Maintenant, quelques questions au sujet de vous-même....

Q.50 Quelle est votre langue maternelle, la première langue que vous avez apprise à parler?

ANGLAIS.....(23).....1

FRANCAIS.....2

AUTRE_____.....3

REF.....8

N.A.....9

Q.51 Quelle est la langue la plus souvent utiliseé dans votre maison?

ANGLAIS.....(24).....1

FRANCAIS.....2

AUTRE_____.....3

REF.....8

N.A.....9

Q.52 En quelle année êtes-vous né?

INSCRIRE L'ANNEE.....(25-26) ___ ___

REF.....98

N.A.....99

Q.53 Quel est le niveau de scolarité le plus élevé que vous ayez fréquenté...élementaire/intermédiaire, secondaire, collège communautaire, école d'infirmière ou de métiers, université ou graduée?

ELEMENTAIRE/INTERMEDIAIRE.....(27-28).....11

SECONDAIRE (êtes-vous diplomé?)

NON.....12

OUI.....13

METIERS, COLLEGE COMMUNAUTAIRE OU AUTRE INSTITUTION NON-UNIVERSITAIRE.....14

UNIVERSITE:

avez-vous reçu un diplôme? NON.....15

OUI.....16

GRADUEE (POST-UNIVERSITAIRE)

avez-vous reçu un diplôme? NON.....17

OUI.....18

N.S.P.....97

REF/NA.....99

Q.54 Etes-vous (est-ce que la femme-chef de votre ménage est) présentement employée, sans emploi, invalide retraitée, étudiante, ménagère ou autre?

EMPLOYEE: Est-ce à votre/son compte.....(29-30).....11

employée à plein-temps.....12

employée à temps-partiel.....13

SANS EMPLOI.....14

RETRAITEE.....21

INVALIDE.....22

ETUDIANTE.....23

MENAGERE.....24

REF.....98

N.A.....99

AUCUNE FEMME A LA MAISON.....00

Q.55 Etes-vous (est-ce que l'homme-chef de votre ménage est) présentement employé, sans emploi, invalide retraité, étudiant, ou autre?

EMPLOYE: Est-ce à votre/son compte.....(29-30).....11

employé à plein-temps.....12

employé à temps-partiel.....13

SANS EMPLOI.....14

RETRAITE.....21

INVALIDE.....22

ETUDIANT.....23

REF.....98

N.A.....99

AUCUN HOMME A LA MAISON.....00

Q.56 Au total et en vous incluant, combien de personnes sont-elles comprises dans votre ménage?

_____(33)..___

NSP/REF/NA.....9

Q.56 En pensant au revenu total de votre ménage en 1987... c'est à dire le revenu de toutes les sources avant les impôts, est-ce que le revenu total de votre ménage en 1987

A. était supérieur à 15,000$?

OUI.....(34-35)..... ALLER A C

NON.....11 ALLER A B

B. est-ce que le revenu total de votre ménage en 1987 et avant les impôts était supérieur à 10,000$?

OUI.....10 STOP

NON.....09 STOP

C. est-ce que le revenu total de votre ménage en 1987 était supérieur à 20,000$?

OUI..... ALLER A D

NON.....13 STOP

D. est-ce que le revenu total de votre ménage en 1987 était supérieur à 25,000$?

OUI..... ALLER A E

NON.....15 STOP

E. est-ce que le revenu total de votre ménage en 1987 était supérieur à 30,000$?

OUI.....18 STOP

NON.....17 STOP

N.S.P.....97

REF.....98

N.A.....99

Ce sont là toutes les questions que nous avions pour vous aujourd'hui/ce soir. Merci de votre collaboration à cette étude.

Q.57 INSCRIRE LE SEXE DU REPONDANT.....FEMININ....(36)....1

MASCULIN.....2

Q.58 INSCRIRE LA DUREE APPROXIMATIVE DE L'ENTREVUE.....(37-38)... __ __

S'ASSURER QUE TOUT EST COMPLET.....MERCI

APPENDIX B

QUESTIONS OF FOCUS GROUP PARTICIPANTS

Re: Home Heating

1) Is there a direct air delivery system for wood heat?

2) Is there a way we can change our heating system to natural gas?

3) What is the best method of heating - oil, wood, or electricity? Which one is the most comfortable and the most efficient?

4) Why is the government trying to get us to convert to electric heat?

5) I am interested in solar energy and would like to know what is the best system for me.

Re: Improving Efficiency of Home

1) How does tin foil compare to polyethylene as a vapor barrier?

2) How thick should the insulation be?

3) I would like to know more about R-2000 homes.

4) I would like to find a way to reduce the heat loss from my garage.

5) What new technologies are available to conserve energy and are they effective?

6) I would like to know if there are any improvements I can do to make my home more efficient. Is there anyone who will come to my home and tell me this?

7) I would like to know if there is a way I can cut my heating costs. Is there a way to have this evaluated?

8) Is there a way to insulate around plugs and outlets once the house has been built?

9) NB Power and NB Housing should work together to provide information on energy use in the home. NB Power would monitor energy consumption in homes and see if there is a way for that home to save energy.

Re: Cost of Energy

1) In western Canada they pay less for heat and I wonder why the rest of Canada cannot pay their prices.

2) I wonder what would happen if the government built Lepreau II. Would this reduce our energy bill?

3) What will happen to the price of oil? Will it rise again?

4) What would be the cost of constructing a R-2000 home?

5) If everyone switches to electricity, would there be a price hike in electricity costs?

Re: Informational Needs

1) Where should we go to get information?

2) I wish that the National Research Council would make their findings on energy use available to the public.

3) I think that the information that is available at the NB Power office where you pay your bill should be available at other payment locations as well e.g. corner stores.

Re: Other

1) What is the difference between double-pane and triple-pane windows?

2) With more and more people heating with wood will there be pollution controls put in place?

3) What about the homes that are super insulated such as R-2000? They are cheap to heat, but do they provide proper ventilation? How would it affect one's health?

4) The government should provide building standards for homes and a list of contractors which they feel meet these standards.

APPENDIX C

BIBLIOGRAPHY

Reference Works

Barriers to Recognition of Energy Efficiency in Housing Re-sale. Energy, Mines and Resources.

Condensation in the Home: Where, Why and What to Do About It. Canada Mortgage and Housing Corporation. 1982.

Cut Home Energy Costs Loan Program. Manitoba Energy and Mines.

Energy Scene: At Home. New Brunswick Energy Secretariat.

Household Facilities and Equipment. Statistics Canada. 1981 & 1987.

Income Distribution By Size In Canada. Statistics Canada. 1985.

Keeping the Heat In. Energy, Mines and Resources. 1983.

Living in R-2000 Comfort. Canadian Home Builders' Association.

New Brunswick Energy Review. Department of Forests, Mines and Energy. 1985.

New Brunswick Profile: Part 1. Statistics Canada. 1987.

New Brunswick: Selected Social and Economic Characteristics. Statistics Canada. 1983.

Reports and Articles

Bureau of Management Consultants. Client Survey of the Results of Three Marketing Campaigns Home Energy Programs. 1987.

Claxton, John D., J.R. Brent Ritchie, Gordon H.G. McDougall. Energy Consumption and Conservation Patterns in Canadian Households. Vol I & II. 1980.

Gardner Pinfold Consulting Economists Ltd. A Survey of Public Attitudes Towards energy Conservation. 1987.

IBI Group. Analysis of Residential Energy Audit Activity in North America. Energy, Mines and Resources Canada. 1985.

Survey of Residential Fuel Wood Use in New Brunswick. Department of Natural Resources and Energy. 1985.

New Brunswick
Nouveau-Brunswick

Canada